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ABSTRACT

The study examined the effects of an inservice program for nine resource and eight itinerant teachers on skills of regular classroom teachers in meeting needs of visually handicapped students enrolled in their classes and supportive services provided to classroom teachers by resource and itinerant teachers. An introductory chapter covers background of the study, statement of the problem, need for the study, statement of purpose, review of the literature, hypotheses, and delimitations. The research design, covered in a second chapter, included a survey of classroom teachers, a survey of resource and itinerant teachers, and an objective test of knowledge administered to resource and itinerant teachers. The third chapter presents results of statistical analysis relating to the research hypotheses, results of supplementary analysis of classroom teacher skills and supportive services provided by resource and itinerant teachers, subjective written comments by classroom teachers, and evaluation of the inservice class by participants. Chapter 4 offers findings, conclusions, and recommendations which include: the inservice program was effective in increasing the self confidence of classroom teachers relative to maintaining realistic expectations for their visually handicapped students; the program did not have impact on classroom teacher evaluations of supportive services; and the type of school in which itinerant teachers worked had no effect on self evaluations of itinerant teachers. Appended are sample survey forms, evaluation forms, responses, comments, and tables with statistical data. (SB)

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INSERVICE TRAINING FOR TEACHERS OF VISUALLY HANDICAPPED STUDENTS

Joy R. Efron, Ed.D.

Project Director

Prepared Under Grant No. 19-64733-80-3293-7100 from the

California State Department of Education

Division of Special Education
Los Angeles Unified School District
June 30, 1980

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FORWARD

STATEMENT OF FUNDING

The study reported here was part of a program of studies in Special Education in the Division of Special Education, Los Angeles Unified School District. The study was conducted during the 1979-80 school year under the auspices of the Special Studies supported by Grant No. 19-64733-80-3293-7100 between the California State Department of Education and the Los Angeles Unified School District.

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I also wish to thank the following people for helping to develop the surveys: Frank Jost, Chairman, Research Approvals Committee, for his suggestions about survey construction; Donna Olmsted, Advisor, Planning and Development, for helping design survey format; Fred Sinclair, Rose-Marie Swallow, Jim Esterle and Nancy Hill for critiquing the surveys; and Prairie Street School teachers as well as high school teachers in Dr. Jim Johnson's class at Sacramento State College who participated in field testing the surveys.

More than three hundred classroom teachers who had visually handicapped students in their classes gave extremely valuable input by completing

surveys; many wrote pertinent comments as well. Resource and itinerant teachers and other Visually Handicapped program staff cooperated in numerous ways: providing me with constantly updated teacher lists, completing surveys, taking tests, participating in the inservice class, and sharing materials for the handbook (Appendix K).

A thought-provoking session of the inservice class was provided by the panel of visually handicapped adults consisting of Ruth Acosta, Frances Mannino, Norma Shannon, Tom Shannon and Fred Sinclair.

Kathy Henry, Principal, and faculty and staff of Prairie Street School provided office space, suggestions, and moral support throughout the year.

Assistance and input from the many participants in this study has led to identification of teacher needs in working with visually handicapped students and a model for meeting those needs. I am hopeful that the end product will be delivery of more effective services to visually handicapped students.

Joy R. Efron
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INSERVICE TRAINING FOR TEACHERS OF VISUALLY HANDICAPPED STUDENTS

by Joy R. Efron, Ed.D.

ABSTRACT

Purpose The purpose of this study was to determine the effects of an inservice training program for resource and itinerant teachers on (1) skills of regular classroom teachers in meeting needs of visually handicapped students enrolled in their classes, and (2) supportive services provided to classroom teachers by resource and itinerant teachers.

Hypotheses Hypotheses were tested concerning differences between experimental and control groups relating to:

(1) Classroom teacher skills in meeting needs of visually handicapped students (measured by classroom teacher self-evaluations);

(2) Supportive services provided by resource and itinerant teachers (evaluated by classroom teachers);

(3) Supportive services provided by resource and itinerant teachers (measured by resource and itinerant teacher self-evaluations);

(4) Factual knowledge of resource and itinerant teachers (measured by objective tests administered to resource and itinerant teachers).

Research Design An inservice training program for resource and itinerant teachers was implemented in Spring, 1980, using data from a needs assessment conducted at the end of the Fall semester (January, 1980). The needs assessment consisted of (1) a survey of classroom teachers, including self-evaluations and evaluations of supportive services, (2) a survey of resource and itinerant teachers, and (3) an objective test of knowledge administered to resource and itinerant teachers.

The experimental group consisted of nine resource teachers and eight itinerant teachers who attended the 32-hour inservice class, as well as the classroom teachers to whom they provided supportive services. The control group consisted of nine resource teachers and seven itinerant teachers who did not attend the inservice class, as well as the classroom teachers to whom they provided supportive services. (Each resource and itinerant teacher provided supportive services to approximately 20 classroom teachers.)

At the conclusion of the inservice course, the surveys and test of knowledge were administered again as post-tests to evaluate the effectiveness of the inservice training class and to indicate future staff development needs. Additionally, participants in the inservice class were asked to complete course evaluations.

Statistical Analysis Analysis of classroom teacher skills and supportive services was in five parts: Expectations, Counseling and Guidance, Facilitating Acceptance, Teaching Methods, and all areas combined. Analysis of factual knowledge of resource and itinerant teachers was in eight parts: Legislation, Characteristics, Trends and Services; Teacher Role and Research; Educational Implications of Visual Limitations; Resources; Specialized Skills Needed by Visually Handicapped Students; Assessment; Facilitating Acceptance and Modifying the Regular Program, and all areas combined.

Differences between experimental and control groups on both the pre-test and the post-test were analyzed by t-tests. T-tests were also used to identify changes within each group from pre-test to post-test.

Supplementary Analysis Differences among teachers, grouped according to characteristics other than the experimental treatment, were analyzed by analysis of variance, utilizing the Scheffé procedure, and by t-tests.

Supplementary analysis of classroom teacher self-evaluations and evaluations of supportive services was performed for groups of classroom teachers according to teaching level, prior experience teaching VH students, feelings about working with a VH student, and type of supportive services. Supplementary analysis of self-evaluations of supportive services was performed for groups of resource and itinerant teachers according to type of supportive service, teaching level of resource teachers, type of school in which itinerant teachers work, and amount of experience teaching visually handicapped students.

Results Relative to Experimental Treatment

1. Classroom teachers in the experimental group had significantly better self-evaluations than classroom teachers in the control group in the area of Expectations.

2. There were no significant differences between classroom teacher evaluations of supportive services provided by control and experimental groups of resource and itinerant teachers.

3. There were no significant differences between self-evaluations of control and experimental groups of resource and itinerant teachers. However, self-evaluations in the experimental group improved significantly in the specific areas of Teaching Methods, Counseling and Guidance, and Facilitating Acceptance.

4. Resource and itinerant teachers in the experimental group were significantly more knowledgable than resource and itinerant teachers in the control group in general, and in the specific areas of Legislation, Teacher Role and Research, Facilitating Acceptance and Modifying the Regular Program, and Resources.

Results Relative to Supplementary Analysis

1. Elementary school teachers had significantly better self-evaluations and significantly better evaluations of supportive services than did junior and senior high school teachers.

2. Classroom teachers who indicated positive feelings toward their VH student had significantly better self-evaluations and significantly better evaluations of supportive services than did classroom teachers who indicated uncertain or negative feelings.

3. There were no significant differences in self-evaluations or in evaluations of supportive services between (1) classroom teachers who had prior experience teaching visually handicapped students and (2) classroom teachers who were teaching visually handicapped students for the first time.

4. There were no significant differences in self-evaluations or in evaluations of supportive services between (1) classroom teachers who received supportive services from resource teachers and (2) classroom teachers who received supportive services from itinerant teachers.

5. Results were inconclusive relative to differences in self-evaluations among resource and itinerant teachers grouped according to amount of experience teaching visually handicapped students. Resource and itinerant teachers with 1-8 years of experience tended to have better self-evaluations than did resource and itinerant teachers with 9-14 years of experience.

6. There were no significant differences in self-evaluations between resource teachers and itinerant teachers, among resource teachers grouped according to teaching level, or between itinerant teachers grouped according to type of schools in which itinerant teachers worked.

Conclusions

1. The inservice training program was effective in increasing

(1) self-confidence of classroom teachers relative to maintaining realistic expectations for their visually handicapped students, (2) self-confidence of participating resource and itinerant teachers, and (3) factual knowledge of resource and itinerant teachers relative to providing effective supportive services to classroom teachers.

2. The inservice program did not have an effect on classroom teacher evaluations of supportive services during the time period of the study.

3. Other factors affecting classroom teacher self-confidence and satisfaction with supportive services were teaching level and feelings towards working with a visually handicapped student.

4. Type of supportive service and experience teaching visually handicapped students did not affect classroom teacher self-confidence or satisfaction with supportive services.

5. Self-evaluations of resource and itinerant teachers were not affected by type of supportive service, teaching level of resource teachers, or type of school in which itinerant teachers worked. Results were inconclusive concerning the effect of teaching experience on self-evaluations of resource and itinerant teachers.

Recommendations

1. A follow-up study needs to be conducted to determine the long-range effects of the inservice training program on skills of classroom teachers and supportive services provided by resource and itinerant teachers.

2. Classroom teachers who have visually handicapped students in their classes need inservice training, with provisions for released time, and ongoing support services.

3. A continuous program of inservice training is needed by resource and itinerant teachers to develop techniques of providing effective supportive services and to keep abreast of technological and curricular changes.

TABLE OF CONTENTS

Page

FORWARD ii

STATEMENT OF FUNDING ii

DISCLAIMER ii

ACKNOWLEDGMENTS ii

ABSTRACT v

LIST OF TABLES xiv

Chapter

1. INTRODUCTION 1

BACKGROUND 1

Legislative Mandates 1

Changes in Characteristics of Visually Handicapped Students 2

Technological and Curricular Developments 2

Current Areas of Emphasis in Teacher Training Programs 3

THE PROBLEM 4

NEED FOR THE STUDY 6

STATEMENT OF PURPOSE 6

REVIEW OF LITERATURE 7

Placement of Visually Handicapped Students 7

Factors Necessary for Successful Mainstreaming . . 9

Responsibilities of Classroom Teachers 11

Materials for Classroom Teachers 13

Responsibilities of Resource and Itinerant Teachers 14

Page

HYPOTHESES 19

DELIMITATIONS 21

2. METHODS OF THE STUDY 22

SELECTION OF SUBJECTS 22

Method of Selection 22

Number of Subjects 23

RESEARCH DESIGN 28

Survey of Teacher Needs: Working with Visually Handicapped Students 28

Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers 30

Objective Test of Knowledge for Resource and Itinerant Teachers 31

Inservice Training Program for Resource and Itinerant Teachers 31

INSTRUMENTATION 39

DATA COLLECTION PROCESS 42

DATA ANALYSIS 43

PROJECT PERSONNEL 45

RETURNS 45

Survey of Classroom Teachers 45

Survey of Resource and Itinerant Teachers 47

Objective Test of Knowledge 49

Inservice Evaluation 49

3. RESULTS 50

INTRODUCTION 50

FIRST HYPOTHESIS: CLASSROOM TEACHER SKILLS (SELF-EVALUATIONS) 53

Page

SECOND HYPOTHESIS: SUPPORTIVE SERVICES PROVIDED BY RESOURCE AND ITINERANT TEACHERS (EVALUATED BY CLASSROOM TEACHERS) 57

THIRD HYPOTHESIS: SUPPORTIVE SERVICES PROVIDED BY RESOURCE AND ITINERANT TEACHERS (SELF-EVALUATIONS) 61

FOURTH HYPOTHESIS: FACTUAL KNOWLEDGE OF RESOURCE AND ITINERANT TEACHERS (OBJECTIVE TEST) 65

SUPPLEMENTARY ANALYSIS 72

Classroom Teacher Skills (Self-Evaluations) 74

Supportive Services Provided by Resource and Itinerant Teachers (Evaluated by Classroom Teachers) 81

Supportive Services Provided by Resource and Itinerant Teachers (Self-Evaluations) 91

WRITTEN COMMENTS BY CLASSROOM TEACHERS ON SURVEYS 99

Comments on the Pre-Test Survey 99

Comments on the Post-Test Survey 102

EVALUATION OF INSERVICE CLASS 103

Objective Section of Course Evaluation 103

Short Answer Section of Course Evaluation 103

4. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS . . . 108

HYPOTHESES 108

RESEARCH DESIGN 110

SUMMARY OF FINDINGS 111

Classroom Teacher Skills (Self-Evaluations) 111

Supportive Services Provided by Resource and Itinerant Teachers (Evaluated by Classroom Teachers 114

Page

Supportive Services Provided by Resource and Itinerant Teachers (Self-Evaluations) 116

Factual Knowledge of Resource and Itinerant Teachers 118

Inservice Course Evaluations 120

CONCLUSIONS 120

RECOMMENDATIONS 122

Current Program Practices 122

Personnel Training 122

Additional Research Questions 123

Legislation 124

REFERENCES 125

APPENDIXES

A. "SURVEY OF TEACHER NEEDS: WORKING WITH VISUALLY HANDICAPPED STUDENTS" 129

B. TRANSMITTAL LETTER TO CLASSROOM TEACHERS FOR THE PRE-TEST SURVEY 134

C. TRANSMITTAL LETTER TO PRINCIPALS FOR THE PRE-TEST SURVEY 135

D. TRANSMITTAL LETTER TO CLASSROOM TEACHERS FOR THE POST-TEST SURVEY 136

E. TRANSMITTAL LETTER TO PRINCIPALS FOR THE POST-TEST SURVEY 137

F. REQUEST FOR RESULTS FORM 138

G. "SURVEY OF RESOURCE AND ITINERANT TEACHERS: PROVIDING SUPPORTIVE SERVICES TO CLASSROOM TEACHERS" 140

H. TRANSMITTAL LETTER TO RESOURCE AND ITINERANT TEACHERS FOR THE PRE-TEST SURVEY 144

I. TRANSMITTAL LETTER TO RESOURCE AND ITINERANT TEACHERS FOR THE POST-TEST SURVEY 146

Page

APPENDIXES

J. OBJECTIVE TEST OF KNOWLEDGE FOR RESOURCE AND ITINERANT TEACHERS 148

K. INSERVICE COURSE EVALUATION FORM 156

L. RESPONSES TO INSERVICE COURSE EVALUATION FORM 158

M. REPRESENTATIVE WRITTEN COMMENTS ON CLASSROOM TEACHER SURVEYS 168

N. MASTER DATA INFORMATION 175

LIST OF TABLES

Table		Page
1.	Number of Resource and Itinerant Teachers in Experimental and Control Groups	23
2.	Number of Classroom Teachers Served by Resource and Itinerant Teachers in Experimental and Control Groups	26
3.	Number of Schools Served by Resource and Itinerant Teachers in Experimental and Control Groups	27
4.	Percentage of Returns of Surveys and Evaluation Instruments by Groups	46
5.	Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Classroom Teachers on the Pre-Test Survey	54
6.	Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Classroom Teachers on the Post-Test Survey	55
7.	Unpaired t-Test Scores for Post-Test - Pre-Test Differences in Self-Evaluations of Control and Experimental Groups of Classroom Teachers	56
8.	Unpaired t-Test Scores for Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers on the Pre-Test Survey	58
9.	Unpaired t-Test Scores for Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers on the Post-Test Survey	59
10.	Unpaired t-Test Scores for Post-Test - Pre-Test Differences in Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers	60

LIST OF TABLES

Table		Page
11.	Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Resource and Itinerant Teachers on the Pre-Test Survey	62
12.	Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Resource and Itinerant Teachers on the Post-Test Survey	63
13.	Unpaired t-Test Scores for Post-Test - Pre-Test Differences in Self-Evaluations of Control and Experimental Groups of Resource and Itinerant Teachers	64
14.	Unpaired t-Test Scores for Differences in Level of Knowledge of Control and Experimental Groups on the Objective Written Pre-Test	67
15.	Means and Percentages of Correct Responses by Groups of Resource and Itinerant Teachers on the Objective Test of Knowledge on the Pre-Test	68
16.	Unpaired t-Test Scores for Differences in Level of Knowledge of Control and Experimental Groups on the Objective Written Post-Test	69
17.	Means and Percentages of Correct Responses by Groups of Resource and Itinerant Teachers on the Objective Test of Knowledge on the Post-Test	70
18.	Paired t-Test Scores for Post-Test - Pre-Test Differences in Level of Knowledge of Itinerant and Resource Teachers in Control and Experimental Groups as Measured by Objective Written Test	71
19.	Mean Ratings and Standard Deviations of Self-Evaluations by Classroom Teachers for Each Area on the Pre-Test Survey	75

LIST OF TABLES

Table — Page

20. Mean Ratings and Standard Deviations of Self-Evaluations by Classroom Teachers for Each Area on the Post-Test Survey 76

21. Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Experience Teaching Visually Handicapped Students 77

22. Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Teaching Level 79

23. Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Feelings About Working with a Visually Handicapped Student 80

24. Unpaired t-Test Scores for Self-Evaluations of Classroom Teachers Grouped According to Type of Supportive Services (Resource or Itinerant) 82

25. Mean Ratings and Standard Deviations of Supportive Services by Classroom Teachers for Each Area on the Pre-Test Survey 84

26. Mean Ratings and Standard Deviations of Supportive Services by Classroom Teachers for Each Area on the Post-Test Survey 85

27. Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Teaching Level . 86

28. Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Experience Teaching Visually Handicapped Students 87

29. Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Feelings About Working with a Visually Handicapped Student 89

LIST OF TABLES

Table		Page
30.	Unpaired t-Test Scores for Supportive Services as Evaluated by Classroom Teachers Grouped According to Type of Supportive Services (Resource or Itinerant)	90
31.	Mean Ratings and Standard Deviations of Self-Evaluations by Resource and Itinerant Teachers for Each Area on the Pre-Test Survey	92
32.	Mean Ratings and Standard Deviations of Self-Evaluations by Resource and Itinerant Teachers for Each Area on the Post-Test Survey	93
33.	Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Type of Program	94
34.	Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Teaching Level	95
35.	Analysis of Variance and Scheffé Procedure for Self-Evaluations of Itinerant Teachers Grouped According to Type of School (Regular or Special Education)	97
36.	Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Years of Experience Teaching Visually Handicapped Students	98
37.	Number of Written Comments on Pre-Test Survey by Classroom Teachers Served by Experimental and Control Groups of Resource and Itinerant Teachers	100
38.	Number of Written Comments on Post-Test Survey by Classroom Teachers Served by Experimental and Control Groups of Resource and Itinerant Teachers	101
39.	Ratings of Inservice Class by Participants (n=19) on Objective Portion of Course Evaluation Form (1=low; 8=excellent)	104

CHAPTER ONE

INTRODUCTION

BACKGROUND

Education of visually handicapped students has changed greatly in the last ten years (1970-1980). Changes in organization, identification, assessment, placement and instructional strategies are due to a variety of factors including legislative mandates, changing characteristics of the visually handicapped student population, technological and curricular developments, and shifts of emphases in teacher training programs.

Legislative Mandates

Under current federal and state legislative mandates, education of individuals with exceptional needs must take place in the least restrictive educational environment.

P.L. 94-142 requires that

> to the maximum extent appropriate, handicapped children... are educated with children who are not handicapped, and that...removal of handicapped children from the regular educational environment occurs only when...education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (Sec. 612-5)

The intent of this legislation is that

> public education must offer special assistance to individuals with exceptional needs in a setting which promotes maximum interaction with the general school population and which is appropriate to the needs of both. (CAC, Title 5, 3151-f)

Inservice training is mandated by P.L. 94-142. Each state is required to develop and implement

> a comprehensive system of personnel development which shall include the inservice training of general and special educational instructional and support personnel... (Sec. 613 (3))

Changes in Characteristics of Visually Handicapped Students

Due to advancements in medical science, many causes of blindness (such as retrolental fibroplasia) have been practically eliminated. Pre-natal conditions are currently the leading cause of visual handicaps in children, and many pre-natal conditions which affect the eyes are not limited to the eyes. Changing causes of blindness and the ability of medical science to save lives of many seriously involved children have resulted in a dramatic increase in visually handicapped students who have additional handicaps. Most visually handicapped students today are not blind, but are partially seeing, with varying degrees of functional, residual vision.

A national study by the American Foundation for the Blind (Spungin, 1977:63) determined that half of the visually handicapped students were multiply handicapped and only one-eighth were totally blind.

Technological and Curricular Developments

During the last ten years, there have been numerous important developments in technology for the visually handicapped. These include the closed circuit television system magnification devices, a plethora of low vision aids, Optacon, Kurzweil reading machine, compressed speech devices, talking calculator, and paperless braille.

Recent curricular developments include SAVI (Science Activities for the Visually Impaired), MAVIS (Materials Adaptations for the Visually Impaired in the Social Sciences), Barraga Visual Efficiency Program, Mangold Braille Developmental Reading, Patterns Braille Reading Program, Listening to Learn Program (Clearinghouse Depository for Handicapped Students Aural Media Center), and Project PAVE (Piagetian Assessment of Visually Handicapped Education).

Current Areas of Emphasis in Teacher Training Programs

On a national basis, teacher training programs in the area of the visually handicapped have initiated a competency-based curriculum during the last decade. The nationally-developed competency areas (Spungin, 1977:11) are Assessment and Evaluation, Educational Instructional Strategies, Guidance and Counseling, Administration and Supervision, Media and Technology, School Community Relations, and Research. Generally, the nationally-developed competencies (Spungin, 1977:109) fall into two categories: teaching and assessment, and other services.

In California, due to changes in teacher credential legislation, teacher training in Special Education is now much more generic than in the past, proceeding from a broad understanding of childhood development, to atypical development, to broad generic areas of Special Education. Few units are available in the student's program to gain specialized skills and information in the area of specialty. This is in sharp contrast to previous programs which were highly specialized and restricted to a categorical area of Special Education. Areas currently given much more stress than in the past are assessment, working with multi-handicapped students, the role of

technology, specialized curricular and technological innovations, low vision aids, and psycho-social development, with strong orientation toward assessment and prescriptive individualized teaching.

THE PROBLEM

Due to a combination of legislative mandates and changing characteristics of the visually handicapped (VH) student population, the role of the teacher of VH students is being redefined and substantially altered. Teachers of VH students today are seldom found in self-contained classes with overall classroom responsibilities. Instead, resource and itinerant teachers are increasingly found in positions of providing consultive/supportive services to regular teachers and regular schools as well as assessing and identifying specialized student needs and providing appropriate remediation and specialized instruction relative to those needs.

In the Los Angeles Unified School District, almost 500 visually handicapped students are served by three major programs: (1) a special day school (Frances Blend) with special day classes, (2) resource room programs in regular schools to which a group of visually handicapped students are transported and where they receive instruction in regular classrooms as well as supplementary teaching services from a full-time resource teacher, and (3) itinerant programs in which visually handicapped students attend regular classes in their neighborhood schools, and, in addition, receive special supplemental instruction from an itinerant teacher who travels to the various schools in which his/her students are enrolled.

With the emphasis on "least restrictive environment," numerous resource rooms have been closed in the last ten years, and the itinerant program

has increased from one teacher in 1966, when the program was started, to 16 itinerant teachers in 1979. The only VH students participating in the itinerant program in 1966 were functioning on or above grade level and were socially and emotionally mature. With the concept of "least restrictive environment," many visually handicapped students with additional problems are now placed in regular classes.

In 1979-80, 131 students attended Frances Blend School; 155 students were enrolled in resource programs; and 160 students attended local schools with services from an itinerant teacher. In resource and itinerant programs, regular classroom teachers are assigned primary responsibility for the students' education. Supportive services are provided by resource and itinerant teachers. This has caused a two-fold problem.

First, regular classroom teachers have not been trained in Special Education and are not equipped to provide for the needs of visually handicapped students who are integrated into their regular classes. A handicapped child in a regular classroom creates extra responsibility, work and concern for the regular teacher. Thus, inservice training and strong supportive services are needed.

Secondly, teachers of the visually handicapped received their credentials in teacher training programs oriented toward self-contained classes rather than toward the unique blend of skills required of the specialist who works in regular schools in a supportive role with visually handicapped students, their teachers, other students, faculty and the community. In the Los Angeles Unified School District, more than half

of the resource and itinerant teachers received their teacher training over ten years ago and were not prepared for either their changing role or the changing VH student population.

NEED FOR THE STUDY

In the Los Angeles Unified School District, approximately 700 regular classroom teachers work with visually handicapped students in a current academic year. The population of regular teachers working with visually handicapped students changes each year. However, resource and itinerant teachers who provide supportive services represent a much more consistent population. Each resource and itinerant teacher interfaces with approximately 20 regular classroom teachers per semester. Thus, a training program for 20 resource and itinerant teachers has impact on about 400 regular classroom teachers in any given semester. This study was needed to investigate the effectiveness of resource and itinerant teachers in improving the skills of regular classroom teachers with respect to the unique needs of visually handicapped students integrated into regular classes.

STATEMENT OF PURPOSE

The purposes of this study were to determine (1) if there was a significant difference in supportive services provided by resource and itinerant teachers who participated in a program of inservice training and (2) if there was a significant difference in skills of regular classroom teachers in classes containing visually handicapped students who were given supportive services by the two groups of resource and itinerant teachers.

REVIEW OF LITERATURE

A review of literature was conducted for purposes of (1) identifying skills needed by classroom teachers working with visually handicapped students, (2) identifying skills needed by resource and itinerant teachers in order to provide effective supportive services to classroom teachers, and (3) developing content and materials for an inservice course for resource and itinerant teachers.

Placement of Visually Handicapped Students

Public Law 94-142 mandated that handicapped children receive free, appropriate education in the least restrictive environment. The term "least restrictive environment" has been defined in various ways. According to Section 612 (5) of PL 94-142:

> ...to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped, and that special classes, separate schooling, or other removal of handicapped children from the regular educational environment occurs only when the nature or severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

Section 3151 (f) of the California Administrative Code, Title V, explained the intent as follows:

> ...public education must offer special assistance to individuals with exceptional needs in a setting which promotes maximum interaction with the general school population and which is appropriate to the needs of both.

Concerns were expressed by Alonso and Hatlen that the specialized needs of visually handicapped students are not necessarily met in a mainstream setting. Alonso (1978:6) offered an alternative definition:

> ...least restrictive environment...means that the ...experiences of handicapped children should be as much like those of non-handicapped children as possible, while still meeting the special needs created by their handicaps. The 'least restrictive environment' should be individually determined for a particular child at a particular time, and reassessed on an ongoing basis.

Hatlen (1979:4-5) expressed serious concerns relating to the definition of "least restrictive environment."

> Official definitions of this term have created problems for some of us concerned with providing visually impaired children with the most appropriate education.
>
> 'Least restrictive environment' has been defined by the Federal government (and, incidentally, by the State of California) as that environment which provides each child with the most contact with nonhandicapped children. I object strongly to this definition because I think it will result in a situation which was never intended by the Congress of the United States.

He then offered an alternative definition:

> My definition of 'least restrictive environment' is the environment which least restricts the child's learning. Some visually impaired children, if placed in an itinerant program, would be attempting to function in the most restrictive environment in terms of their ability to learn. True, they would spend considerable time with sighted children, but it would be a frustrating, restrictive experience for them. Therefore, I hope that implementation of Public Law 94-142 does not result in children being placed in a regular classroom even though they are not ready for or do not belong in that setting.

Hatlen discussed advantages and disadvantages of the various service delivery models for visually handicapped students: residential school, resource program, itinerant programs and regular classroom placement. He stated that research has not proven that any one type of program is superior to any other for visually handicapped students.

> ...there is no best educational system for all visually impaired students. There is a best program for a particular child, at a particular time in his or her life. Within a single school district there will probably be visually impaired children who need a self-contained classroom, some who will benefit from a resource room,

> and still others who will be appropriately placed in itinerant programs. There may also be students who can best be served in a residential school; this option should always be open to the assessment team. The key to successful placement of the visually impaired child is to have all options available so that each child is appropriately placed and can be moved to other service delivery systems within the district as needs change. (Hatlen, 1979:13)

Hatlen further advised classroom teachers to question inappropriate placement and inadequate support services.

> ...placement of a visually impaired child in your classroom should not result in your needing to spend inordinate amounts of time with this individual child. If you find that you are giving more individual time to the visually impaired child than any other child in your classroom, you should consult with your support system to be certain that you are receiving appropriate services and should question the service delivery system selected for the child. (Hatlen, 1979:13)

Factors Necessary for Successful Mainstreaming

Martin and Hoben (1977:8-10) identified three major factors contributing to success in mainstream programs: an effective classroom teacher, available support for the classroom teacher, and a team approach by all involved professionals. Hatlen (1979:1) cited the need for a qualified, fully trained, capable teacher of visually handicapped students as well as a clear delineation of responsibilities of both the regular classroom teacher and the special teacher. Orlansky (1979:6) stressed the need for good communication and professional respect, stating: "The regular teacher and the resource teacher both have important roles to play. Each can reinforce and support the work of the other." He also advocated flexibility (1979:6) in the roles and responsibilities of both classroom teachers and resource and itinerant teachers, depending upon the resources available to the school district.

Martin and Hoben (1977) conducted a survey of personnel in four different types of school districts, relative to educating visually impaired children. The question was asked: "What is needed to make mainstreaming work?" Responses, listed in order form most to least frequent were:

1. A vision teacher or support person.
2. Cooperation of teachers, the visually impaired student, and ancillary staff.
3. Acceptance of mainstreaming as a workable concept by the teachers, administrators, counselors, and others.
4. Extra planning by teacher; extra time and extra help for teacher.
5. More information for the teacher about visually impaired children.
6. Availability of materials and equipment.
7. Awareness by teachers of individual differences.
8. Cooperative parents who want an independent child.
9. Team effort.
10. Convincing the child he/she has something to offer.
11. Teacher's ability to adapt methods.
12. Teacher's commitment to teaching.
13. Teacher's treatment and expectations of child the same as for other students.
14. Motivated child.
15. Inservice instruction for teachers.
16. Careful personnel selection.
17. Space for compensatory instruction.
18. Humanely oriented teachers who care for children.
19. Opportunity for child to participat as others do.
20. Career education available for child.
21. Exercise of primary responsibility for the child by classroom teacher. (Martin and Hoben, 1977:9)

Concerns of classroom teachers, relative to working with visually handicapped students, were identified by Martin and Hoben (1977:16-17) as the following:

1. Child's self-concept.
2. Child's safety.
3. The extra time required.

4. That classmates not be expected to take care of the visually impaired child.
5. How the child can have contact with other blind students so he can realize his own problems are not unique.
6. Lack of space for compensatory instruction.
7. Whether I can do it well. I'm not trained.
8. Being sure the child gets all information the others get.
9. Having enough staff and equipment to handle the child's needs.
10. Insuring that the child works at her or his own level, not below it.
11. Danger of overloading the good teacher.
12. Developing independence in the child.
13. Producing an adult who contributes to society.
14. Mobility needs.
15. How to make proper adaptation of methods.
16. That the child not use his handicap to get his own way.
17. Life planning.
18. The kind of family support present.
19. Transportation.
20. That there aren't enough trained teachers.
21. How not to overprotect.
22. What to do if the child doesn't have many friends.
23. How to overcome negative attitudes of people in general toward visually impaired children. (Martin and Hoben, 1977:16-17).

Responsibilities of Classroom Teachers

Literature abounds with delineations of roles, responsibilities and competencies of resource and itinerant teachers of visually handicapped students. However, very little is found concerning the roles and responsibilities of classroom teachers who have visually handicapped students in their classes. In the late 1970's, a great deal of material was published consisting of guidelines and suggestions for regular classroom teachers. Although many helpful suggestions were provided to classroom teachers, very little literature was found which clearly delineated responsibilities or competencies of regular classroom teachers. Orlansky (1979) listed the following as customary responsibilities of

the classroom teacher:

-assume the primary responsibility for the visually impaired child's day-to-day educational program.

-inform the resource teacher of curriculum, lesson plans, tests, and assignments in advance, to allow time for obtaining or modifying materials as needed.

-facilitate the integration of the visually impaired child into class activities.

-communicate with the child's parents.

-plan educational goals for the child and evaluate his or her progress.

-maintain a classroom environment that encourages the fullest participation of all students. (Orlansky, 1979:6)

Hatlen (1979:23-24) listed responsibilities of the classroom teacher as follows:

The classroom teacher should:

1. Require that the school district provide some inservice training regarding visual impairment.
2. Be certain that his or her own attitudes toward visual impairment are healthy and realistic.
3. Be the model for acceptance and understanding in the regular classroom.
4. Maintain standards for the visually impaired child which are equal to those set for other children.
5. Provide a setting which will result in the optimal opportunities for academic and social interaction between sighted and visually impaired children.
6. Be comfortable with the support system provided by the teacher of the visually impaired and other ancillary services within the school.
7. Be observant so that specific needs of the child are recognized and shared with the teacher of the visually impaired.
8. Participate fully in the implementation of of the individualized educational plan.
9. Preplan to such an extent that appropriate educational materials are always available.
10. Be comfortable with the fact that the child will need to leave the regular classroom for educational experiences which cannot be provided with sighted students.

The classroom teacher should not:

1. Accept a visually impaired child into a classroom unless he or she has been provided appropriate inservice experience.
2. Accept the visually impaired child into a regular classroom if support services will not be provided.

3. Accept the visually impaired child into the regular classroom if the school system has not provided for appropriate instructional materials.
4. Consider the visually impaired child as one who belongs to somebody else in terms of educational services.
5. Assume the visually impaired child cannot compete and participate in a regular classroom.
6. Assume responsibilities for meeting needs of the visually impaired child directly related to the disability, resulting in spending inordinate time with the visually impaired child at the expense of other students in the classroom. (Hatlen, 1979:23-24)

Materials for Classroom Teachers

Specific suggestions for classroom teachers who have visually handicapped students enrolled in their classes were given by Calovini (1977), Corn and Martinez (1977), Efron (1979), Leslie (1979), Leslie and Singleton (1979), Martin and Hoben (1977), Metsker (1977), Napier (1974), Orlansky (1977 and 1979), Willoughby (n.d.), and in the publications Can I Say "See and Look?" (n.d.) and Helping the Partially Seeing Child in the Regular Classroom (1976).

Materials for classroom teachers defined and explained types and symptoms of visual impairments; described various service delivery models; explained the roles of classroom teachers and supportive personnel; and listed resources, including agencies, organizations, and sources of specialized equipment and materials.

Specific suggestions were provided to classroom teachers relating to expectations; attitudes; orientation to the classroom environment; suggestions to help facilitate acceptance; specialized needs of visually handicapped students, including self-care skills, communication and listening, orientation and mobility, and organization; and special adaptations needed for activities which normally require vision, including chalkboard work, class demonstrations, movies, filmstrips, TV, overhead

projector; use of maps, charts, pictures, diagrams and models; use of microscopes and reproduced materials. Other suggestions were concerned with note taking, use of health records, seating arrangements, procurement and use of specialized materials and equipment, rules, assignments, tests, grading standards, accidents and field trips.

Suggestions for making modifications for specific curricular areas were given in Social Science by Leslie and Singleton (1979); in Science by Hadary, Cohen and Weiss (n.d.), Malone and De Lucchi (1979), De Lucchi, Malone and Thier (n.d.), and Kaschner (1978). Suggestions were given in Physical Education by Buell (1966, 1973 and 1977), Kratz (1978) and Geddes (1973).

Bookbinder (1978) developed a curriculum for teaching elementary school children about disabilities. The five-step procedure included simulation activities, exposure to aids and appliances, guest speakers, use of books, movies, slides and videotapes, and discussions.

Scheffers (1977) developed a series of twenty lessons for teaching children about visual handicaps.

In addition, films which portray the visually handicapped were reviewed by Saltzman (1978).

Responsibilities of Resource and Itinerant Teachers

The literature reviewed abounded with listings and delineations of roles and responsibilities of teachers of visually handicapped students. Concerns were expressed in current literature that many teachers of the visually handicapped are functioning in a tutorial role instead of instructing visually handicapped students with specialized skills.

In a study of the role of itinerant teachers in Pennsylvania (1976),

Moore and Peabody found that curriculum areas which were specific to VH students were not emphasized as much as the general academic skills such as reading and math. Itinerant teachers in Pennsylvania taught reading to over two-thirds of their students at the elementary level and to about one-half of their students at the secondary level. Math was taught to about one-third of their students. Specialized skills, however, were taught to few visually handicapped students: activities of daily living to about one-sixth of the blind students and virtually none of the partially seeing students, utilization of low vision to less than a third of the elementary school partially seeing group and to no secondary students, and typing to less than one-third of the secondary level students, but to almost no elementary students. Moore and Peabody (1976:54) then voiced several concerns, including:

> 1. Should schedules for visually handicapped children be adjusted to allow for instruction in specialized areas, even at the cost of academic skills for certain periods?
> 2. Should instruction in specialized areas be <u>required</u> for visually handicapped children?

Swallow (1980) opposed emphasis by teachers of the visually handicapped on general academic skills:

> The VH teacher's role in the mainstream process must be quite active from the very beginning. It becomes the teacher's duty and responsibility to assist in delineating the educational needs of the student. The VH teacher must be knowledgeable and skilled in assessing the VH students. In addition, the VH teacher is not a tutor. An educational aide or reader can perform this function. The VH teacher must be educationally responsive to the unique needs of the child, to develop the specialized learning situations, and to instruct in specific skill areas....

Hatlen (1979:2) agreed:

> In many situations, the teacher of the visually impaired has been viewed as nothing more than an academic tutor who supplements the experiences provided the visually impaired child in the regular classroom.

> ...a support system that provides nothing more than this is inappropriate and inadequate and will result in tragic consequences for the visually impaired child.

An extremely comprehensive listing of competencies of teachers of the visually handicapped resulted from the work of the American Foundation for the Blind. Professional teacher-educators of the visually handicapped throughout the United States met in a series of meetings to develop national competencies for teachers of the visually handicapped (Spungin, 1977). Seven teaching areas were included: Assessment and Evaluation, Educational Instructional Strategies, Guidance and Counseling, Administration and Supervision, Media and Technology, School Community Relations, and Research. Each goal area was broken into sub-areas and stated in behavioral terms.

After the competencies were developed, a national study was undertaken to determine reactions of teachers of the visually handicapped. Although competencies relating to teaching students were rated the highest, competencies dealing with other services became increasingly important as the number of years of teaching experience increased. Spungin (1977:109) recommended that:

> ...teacher educators should place more stress in their teacher training programs on those competencies that are not directly related to teaching. They should emphasize service areas and their relationship to the visually handicapped and the external community.

Napier (1974:7) advised classroom teachers that resource or itinerant teachers may assist with visually handicapped students in the following ways:

> 1. Supplying reading readiness help.
> 2. Providing in braille the necessary written and reading materials so that the blind child can follow your program.
> 3. Teaching the child how to find his way in the halls, on the stairs, to the restrooms, in the cafeteria, and on the playground....

4. Helping the child to learn how to use the playground equipment.
5. Suggesting indoor and outdoor games which the entire class can enjoy.
6. Helping to adapt lessons in arts and crafts.
7. Occasionally going along on field trips to help the child learn as much as possible from touch, smell, hearing, and even taste.
8. Working out a convenient system so that materials can be prepared, organized, and located so they will be readily available for the blind child's use in your class.
9. Guiding you in learning to know as much as possible about this child....
10. Keeping in touch with local, state and national resources which can serve your program from time to time. (Napier, 1974:7-8)

Orlansky (1979:6) listed the following as roles and responsibilities of resource and itinerant teachers:

-provide inservice training for the regular classroom teacher and other appropriate personnel.
-instruct the visually impaired child directly in special skills which are not part of the regular curriculum, such as braille, orientation and mobility, and utilization of low vision.
-provide special materials and equipment which may be needed (such as braille writers, optical aids, special writing paper, and an abacus) and instruct the child in their use.
-be aware of the specific nature of the child's eye impairment and make recommendations to the regular teacher regarding the child's visual functioning.
-arrange for supplementary instruction to the visually impaired child in areas with which the child is having difficulty.
-communicate with the child's parents.
-offer support, suggestions, and resources to the classroom teacher and other staff members and assist in the maximum possible degree of integration into the educational program.
-participate in planning education goals for the child and evaluating his or her progress.

Hatlen (1979:24-25) listed responsibilities of the teacher of the visually impaired as follows:

The teacher of the visually impaired should:
1. Provide appropriate inservice training of regular classroom teachers, administrators, and others in the district.

2. Recognize and accept the role as advocate for the visually impaired child in a regular classroom.

3. Provide all necessary instructional materials and equipment which will allow the visually impaired child to function in a regular classroom at the optimal level.

4. Provide for comprehensive and thorough assessment of the visually impaired child's needs and communicate these to the regular classroom teacher and others.

5. Assure that the parents are full participants in the educational experiences of the child.

6. Be available to the regular classroom teacher for consultation and assistance whenever needed.

7. Assure that ongoing assessment occurs so that the child is receiving educational services in the most appropriate setting.

8. Provide educational experiences which are needed by the child but cannot be provided in a regular classroom.

9. Be thoroughly prepared to provide instruction in the visually impaired child's area of specific need.

The teacher of the visually impaired should not:

1. Assume responsibilities for the academic education of the child which may be better provided for in a regular classroom. This means that the teacher should not participate in a "no failure" program by acting as an academic tutor to the extent that the child always fulfills all regular classroom responsibilities even if the teacher of the visually impaired must do the work for the child.

2. Succumb to the ever-present danger of creating an atmosphere of "learned helplessness."

3. Accept a service delivery system which does not provide enough time for each visually impaired child to receive the specific instruction needed. (Hatlen, 1977:24)

Specialized skills needed by visually handicapped students were discussed by Corn and Martinez (1977), Hatlen (1979), Northern California Ad Hoc Committee on Assessment (1979), and Swallow (1980). Teaching specialized skills is the responsibility of resource and itinerant teachers. Specialized skills included: braille reading and writing, handwriting, typewriting, use of large print and optical aids; psychomotor development, including motor development, physical education,

and orientation and mobility; independent living skills; social skills; listening skills; tactual skills; visual efficiency; career education; concept development; reasoning; human sexuality; leisure and recreation; and study skills.

Roessing (1979) listed six additional competencies needed by visually handicapped students:

> 1. The child shall demonstrate knowledge of the etiology and prognosis of his specific eye condition.
> ... 2. The child shall demonstrate knowledge of how to be an intelligent consumer of eye-care services.
> ... 3. The child can specifically define which conditions will maximize his visual functioning in the areas of near and far vision and field.
> ... 4. The child will demonstrate his understanding of sources of adapted media and equipment available to physically handicapped, and important agencies.
> ... 5. The child will demonstrate knowledge of vocational resources available to the visually handicapped, including pre-vocational or career awareness materials, through job placement programs.
> ... 6. The child will demonstrate the ability to adapt his environment to his disability.

Other responsibilities of resource and itinerant teachers include working with parents, counseling and guidance, securing materials, serving as an advocate for visually handicapped students, interpreting and explaining the program in the school and community, and coordinating services.

HYPOTHESES

The following hypotheses (stated in the null form for purposes of statistical analysis) were tested:

1. There are no significant differences in levels of classroom teacher skills in meeting specific needs of visually handicapped students integrated into regular classes between (1) regular teachers who received supportive services of resource and itinerant teachers who participated

in an inservice program, and (2) regular teachers who received supportive services of resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations completed by classroom teachers.

2. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by evaluations completed by classroom teachers.

3. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations of resource and itinerant teachers.

4. There are no significant changes in the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers, as measured by written tests administered prior to and subsequent to participation in an inservice program.

Each of the first three hypotheses was statistically analyzed in five areas of the criterion variable: Expectations, Counseling and Guidance, Facilitating Acceptance, Teaching Methods, and all areas combined. The fourth hypothesis was statistically analyzed in eight areas: Legislation, Teacher Role/Research, Educational Implications of Visual Limitations, Resources, Specialized Skills, Assessment, Facilitating Acceptance/Modifying the Regular Program, and all areas combined.

Additionally, classroom teacher skills and supportive services,

as evaluated by classroom teachers, were statistically analyzed by groups of classroom teachers according to teaching level, prior experience teaching visually handicapped students, feelings about working with a visually handicapped student, and type of supportive services. Self-evaluations of supportive services by resource and itinerant teachers were statistically analyzed by type of supportive services, teaching level of resource teachers, type of school in which itinerant teachers worked, and years of experience teaching the visually handicapped.

DELIMITATIONS

This study was delimited to certificated staff members of the Los Angeles Unified School District who had visually handicapped students integrated into their regular classrooms, grades one through twelve, during the 1979-80 academic year. Teachers included were (1) regular classroom teachers in whose classes visually handicapped students were integrated, and (2) resource and itinerant teachers who provided supportive services to visually handicapped students and their regular classroom teachers. There were no attempts to differentiate between sex, age, marital status, ethnic groups, or personality traits.

CHAPTER TWO

METHODS OF THE STUDY

SELECTION OF SUBJECTS

Subjects selected for this study were teachers in the Los Angeles Unified School District during the 1979-80 school year: (1) resource and itinerant teachers who provided supportive services to visually handicapped (VH) students and their classroom teachers and (2) those classroom teachers, grades 1-12, whose classes contained visually handicapped students and who received supportive services from resource and itinerant teachers.

Method of Selection

The research project was explained at a joint meeting of resource and itinerant teachers in September, 1979. Eighteen of the 20 resource teachers chose to participate in the study; 15 of the 16 itinerant teachers chose to participate in the study. Participating resource and itinerant teachers then provided the Project Director with a list of all classroom teachers to whom they provided supportive services in the Fall semester. Due to changes in students' programs, teacher lists were subsequently updated for the Spring semester.

Participating resource and itinerant teachers were invited to participate in a program of inservice training relative to techniques of helping regular classroom teachers acquire skills needed in working with visually handicapped students who were integrated in regular classes.

Participation in the inservice program was limited to 17 (half the total number of VH staff participating in the study).

Number of Subjects

Subjects in this study included teachers of the visually handicapped and classroom teachers who had visually handicapped students enrolled in their classes. There were 33 teachers of the visually handicapped: 18 resource teachers and 15 itinerant teachers.

Table 1

Number of Resource and Itinerant Teachers in Experimental and Control Groups

Teachers of the Visually Handicapped	Experimental		Control		Total	
	Number	Percent	Number	Percent	Number	Percent
Resource Teachers	9	50.00	9	50.00	18	100
Itinerant Teachers	8*	53.33	7	46.67	15	100
Total number of VH Teachers...	17		16		33	

*One itinerant teacher only attended one-fourth of the inservice class and was disqualified from the study.

In the Fall semester of the 1979-80 school year, 582 classroom teachers in 97 schools had VH students enrolled in their classes. The 18 resource teachers provided supportive services to 267 classroom teachers in 12 schools; the 15 itinerant teachers provided supportive services to 315 classroom teachers in 85 schools.

Due to many changes in students' programs, 224 classroom teachers who had VH students in their classes in Fall, but not during the Spring semester were replaced by 172 classroom teachers who did not have VH students in the Fall, but did have VH students in their classes in the Spring.

In the Spring semester of the 1979-80 school year, 481 classroom teachers in 96 schools had VH students enrolled in their classes. The 18 resource teachers provided supportive services to 224 classroom teachers in 12 schools; the 15 itinerant teachers provided supportive services to 257 teachers in 84 schools. (See Tables 2 and 3.)

Disqualified Subjects. One itinerant teacher attended one-fourth of the inservice class and was disqualified from the study. The 30 classroom teachers (in 8 schools) who received supportive services from the disqualified itinerant teacher were also eliminated from the study.

Also disqualified from the study were classroom teachers who were served by two resource teachers in a team teaching situation, in which one resource teacher was in the experimental group and the other resource teacher was in the control group. In Fall, 17 junior high teachers and 14 senior high teachers were eliminated for this reason; in Spring, 7 junior high teachers and 48 senior high teachers were eliminated for this reason.

The Experimental Group. The experimental group consisted of (1) nine resource and eight itinerant teachers who participated in the inservice program (see Table 1) and (2) the regular teachers whose classes contained visually handicapped students and who received

supportive services from the experimental group of resource and itinerant teachers. In the Fall semester, 254 classroom teachers from 52 schools were part of the experimental group (101 classroom teachers in 8 schools served by resource teachers and 153 classroom teachers in 44 schools served by itinerant teachers).

In the Spring semester, 179 classroom teachers in 41 schools were part of the experimental group (77 classroom teachers in 8 schools served by resource teachers and 102 classroom teachers in 33 schools served by itinerant teachers). (See Tables 2 and 3.)

Control Group. The control group consisted of (1) nine resource and seven itinerant teachers who did not participate in the inservice program (see Table 1) and (2) the regular teachers whose classrooms contained visually handicapped students and who received supportive services from the control group of resource and itinerant teachers. In the Fall semester, 328 classroom teachers from 49 schools were part of the control group (166 classroom teachers in 8 schools served by resource teachers and 162 classroom teachers in 41 schools served by itinerant teachers).

In the Spring semester, 302 classroom teachers in 59 schools were part of the control group (147 classroom teachers in 8 schools served by resource teachers and 155 classroom teachers in 51 schools served by itinerant teachers). (See Tables 2 and 3.)

Table 2

Number of Classroom Teachers Served by Resource and Itinerant Teachers in Experimental and Control Groups

Classroom Teachers by Teaching Level	Type of Program	Fall Semester						Spring Semester					
		Experimental		Control		Total[a]		Experimental		Control		Total[a]	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Special Education	Resource	0		12		12		0		11		11	
	Itinerant	8		20		28		11		20		31	
	Subtotal	8	20.00	32	80.00	40	100	11	26.19	31	73.81	42	100
Elementary	Resource	17		7		24		17		7		24	
	Itinerant	27		30		57		19		36		55	
	Subtotal	44	54.32	37	45.68	81	100	36	45.57	43	54.43	79	100
Junior High	Resource	46		78		124[b]		34		77		111[b]	
	Itinerant	80		73		153		51		76		127	
	Subtotal	126	45.49	151	54.51	277[b]	100	85	35.71	153	64.29	238[b]	100
Senior High	Resource	38		69		107[c]		26		52		78[c]	
	Itinerant	38		39		77		21		23		44	
	Subtotal	76[c]	41.30	108	58.70	184[c]	100	47	38.52	75	61.48	122[c]	100
Total number of classroom teachers ...		254		328		582		179		302		481	

[a]Total numbers do not include 30 classroom teachers served by the itinerant teacher who was disqualified from the study..

[b]Number of junior high school teachers does not include 17 teachers in Fall and 7 teachers in Spring who were served by two resource teachers; one resource teacher was experimental and the other was control.

[c]Number of senior high school teachers does not include 14 teachers in Fall and 48 teachers in Spring who were served by two resource teachers; one resource teacher was experimental and the other was control.

Table 3

Number of Schools Served by Resource and Itinerant Teachers in Experimental and Control Groups

Type of School by Teaching Level	Type of Program	Fall Semester						Spring Semester					
		Experimental		Control		Total[a]		Experimental		Control		Total[a]	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Special Education	Resource	0		1		1		0		1		1	
	Itinerant	3		5		8		3		6		9	
	Subtotal	3	33.33	6	66.67	9	100	3	30.00	7	70.00	10	100
Elementary	Resource	2		1		3		2		1		3	
	Itinerant	22		20		42		18		29		47	
	Subtotal	24	53.33	21	46.67	45	100	20	40.00	30	60.00	50	100
Junior High	Resource	3		3		5[b]		3		3		5[b]	
	Itinerant	13		9		22		8		11		19	
	Subtotal	16	57.14	12	42.86	27[b]	100	11	44.00	14	56.00	24[b]	100
Senior High	Resource	3		3		3[c]		3		3		3[c]	
	Itinerant	6		7		13		4		5		9	
	Subtotal	9	47.37	10	52.63	16[c]	100	7	46.67	8	53.33	12[c]	100
Total number of schools . . .		52		49		97[a,b]		41		59		96[a,b]	

[a]Total numbers do not include 8 schools served by the itinerant teacher who was disqualified from the study.

[b]Total number of junior high schools does not include one junior high which was served by two resource teachers; one resource teacher was experimental and the other was control.

[c]Total number of senior high schools does not include three senior high schools which were served by two resource teachers; one resource teacher was experimental and the other was control.

RESEARCH DESIGN

A needs assessment was conducted at the end of the Fall semester (January, 1980) to determine (1) needs of classroom teachers who had visually handicapped students enrolled in their classes and (2) needs of resource and itinerant teachers in providing effective supportive services to classroom teachers.

The needs assessment consisted of two surveys, "Survey of Teacher Needs: Working with Visually Handicapped Students," (see Appendix A) and "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers," (see Appendix G) as well as an objective test of knowledge for resource and itinerant teachers (see Appendix J).

Based on information from the surveys and the objective test of knowledge, an inservice training program was developed and implemented for half of the resource and itinerant teachers (the experimental group).

At the conclusion of the inservice course, in May, 1980, the surveys and test of knowledge were administered again as post-tests to evaluate the effectiveness of the inservice training class in improving skills of teachers working with VH students and to indicate future staff development needs. Additionally, participants in the inservice class were asked to complete course evaluations (see Appendix K).

Survey of Teacher Needs: Working with Visually Handicapped Students

The "Survey of Teacher Needs: Working with Visually Handicapped Students" (see Appendix A) consisted of 36 items in four major areas: Expectations, Counseling and Guidance, Facilitating Acceptance and Teaching Strategies.

For each of the 36 survey items, two questions were asked. The first question concerned self-evaluation: "Please place an x in one of the boxes to the right of each statement to show how you feel concerning your ability to effectively help a visually handicapped student in your classroom." Responses were arranged on a Likert scale: 1. Extremely Confident, 2. Confident, 3. Adequate, 4. Minimally Adequate, 5. Inadequate, and 6. Not Applicable.

The second question concerned evaluation of supportive services: "Please place an x in one of the boxes to the left of each statement to show how you feel concerning supportive services provided to you by the resource or itinerant teacher of the visually handicapped." Responses were arranged on a Likert scale: 1. Outstanding, 2. Very Helpful, 3. Adequate, 4. Minimally Helpful, 5. Not Helpful, and 6. Not Applicable.

In order to classify respondents, there were four items relating to teaching level, subject specialty, prior experience teaching VH students, and feelings about working with a VH student.

The pre-test survey was sent in January, 1980 to half of the classroom teachers, selected at random, in whose classes visually handicapped students were enrolled (292 teachers in 83 schools). The post-test survey was sent in May to all Los Angeles Unified School District classroom teachers with visually handicapped students in their classes who received supportive services from resource and itinerant teachers participating in the study (481 teachers in 96 schools).

Surveys were accompanied by a transmittal letter from the Assistant Superintendent, Division of Special Education, approved by the Associate Superintendent, Instruction, and the Office of the Deputy Superintendent. Transmittal letters requested participation, stressed the importance of

the study, the voluntary nature of participation, and the confidentiality of the data. (Transmittal letter to classroom teachers for the pre-test survey is found in Appendix B; transmittal letter to principals for the pre-test survey is found in Appendix C. Transmittal letter to classroom teachers for the post-test survey is found in Appendix D; and transmittal letter to principals for the post-test survey is found in Appendix E.) In addition, a Request for Results form (Appendix F) was included with each survey packet sent to teachers.

Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers

The "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers" (see Appendix G) was identical to the "Survey of Teacher Needs: Working with Visually Handicapped Students" except for some minor changes in wording.

For each of the 36 survey items, two questions were asked. The first question concerned self-evaluation: "Please place an x in one of the boxes to the left of each statement to show how you feel concerning your effectiveness in providing supportive services to classroom teachers." Responses were arranged on the same Likert scale as used in the classroom teacher evaluation of supportive services.

The second question concerned evaluation of classroom teachers. This section of the surveys was not statistically analyzed due to concerns expressed by the project statistician that the data would be biased due to the following factors:

1. Rankings of separate teachers would not be independent measures since each special teacher would evaluate varying numbers of regular teachers;

2. Resource and itinerant teachers in the experimental group would probably rate regular teachers higher than would resource and itinerant teachers in the control group;

3. It was impractical to expect or request each resource or itinerant teacher of the visually handicapped to evaluate up to 30 classroom teachers.

In order to classify respondents, there were four items relating to type of program for the visually handicapped (resource or itinerant), teaching level of resource teachers, type of school in which itinerant teachers worked (regular or Special Education), and amount of experience teaching the visually handicapped.

The pre-test survey was sent in January, 1980 to the 33 participating resource and itinerant teachers. In addition, it was sent to five non-teaching VH program staff (Coordinating Principal, Assistant Principal, Instructional Materials Specialist, Proficiency Testing Advisor, and Career Counselor). The post-test survey was sent in May to the same 38 people. Transmittal letters accompanying the surveys are found in Appendixes H and I.

Objective Test of Knowledge for Resource and Itinerant Teachers

An objective test of knowledge was developed for resource and itinerant teachers (see Appendix J). The test consisted of multiple choice, matching, true-false, and short-answer items in seven areas: Legislation, Characteristics, Trends and Services; Teacher Role and Research; Educational Implications of Visual Limitations; Resources; Specialized Skills Needed by Visually Handicapped Students; Assessment; and Facilitating Acceptance and Modifying the Regular Program.

The test was administered to the VH staff in both experimental and control groups (resource teachers, itinerant teachers, and administrative/advisory personnel) as a pre-test in January and again as a post-test in May.

Inservice Training Program for Resource and Itinerant Teachers

All resource and itinerant teachers were invited to participate in a 32-hour inservice class, "Providing Effective Supportive Services to Classroom Teachers Who Work with Mainstreamed Visually Handicapped Students." Enrollment was limited to the first 17 resource and itinerant teachers who applied (half of the total number of resource and itinerant teachers participating in the study). Participants in the course were given the choice of receiving two units toward salary advancement or receiving professional expert pay.

The class was held on eight Thursday afternoons, two hours each, and two Saturdays, eight hours each, from February 21 through April 24, 1980.

The total class enrollment was 20 people. In addition to the 17 resource and itinerant teachers, the class was attended by two teachers from Frances Blend School (self-contained school for VH students), the Instructional Materials Specialist, and the Proficiency Testing Advisor of the Visually Handicapped program. One itinerant teacher only attended one-fourth of the class, and was disqualified from the study.

Emphasis of the course was on effective techniques for resource and itinerant teachers to provide supportive services to classroom teachers who had visually handicapped students integrated in their classes. Course methods included lecture, discussion, audio-visual materials, simulation

activities, guest speakers, review of the literature, and small group development of written guides and materials for classroom teachers. Numerous handout materials were developed by the Project Director for participants in the class (available as a separate report).

Topics covered in the handout materials were:

1. Course outline, bibliography and film evaluations
2. Legislation
3. Role of the resource and itinerant teacher
4. Conference suggestions
5. Low vision clinics and low vision aids
6. Organizational forms and check lists
7. Curricular adaptations: Social Studies
8. Curricular adaptations: Science
9. Curricular adaptations: Physical Education
10. Facilitating acceptance of VH students
11. Resources for specialized materials
12. Assessment

The course content was approved by the Division of Special Education and the Division of Career and Continuing Education.

Instructor for the course was the Project Director. Two class sessions utilized guest speakers. Dr. Rose-Marie Swallow, Professor, Department of Special Education, California State University, Los Angeles, taught the class session on "Assessment Techniques and Instruments."

One class session on the topic "Role of the Resource and Itinerant Teacher, and Specialized Skills Needed by Visually Handicapped Students" utilized a panel of visually handicapped adults. Panel members were:

Mrs. Ruth Acosta, National Federation of the Blind; Mrs Frances Mannino, Teacher-Counselor, Braille Institute of America; Mrs. Norma Shannon, Counselor, State Department of Vocational Rehabilitation; Mr. Tom Shannon, Director, Project ADEPT (Aid to the Disabled in Employment, Placement and Training); and Mr. Fred Sinclair, Director, Clearinghouse Depository for Handicapped Students, State Department of Education.

Inservice Class Content. Topics included:

1. Legislation, characteristics, trends and services affecting visually handicapped students.
   a. Current trends in education of VH students
   b. Differences between PL 94-142, AB 1250, State Education Code, and California Administrative Code (CAC), Title V
   c. Key provisions of PL 94-142, AB 1250, and CAC, Title V
   d. Problems associated with PL 94-142
   e. Key provisions of PL 93-112, Title V, Rehabilitation Act of 1973
   f. Education Code provisions affecting the visually handicapped (authorized programs, mandated programs and supplemental instruction)
   g. Credential for teaching visually handicapped students
   h. Regional centers
   i. Supplemental Security Income (SSI)
2. Skills needed by regular classroom teachers to meet needs of VH students.
   a. Expectations
   b. Counseling and guidance
   c. Facilitating acceptance

d. Teaching methods and strategies to implement the educational program

e. Review of literature and development of written guidelines for classroom teachers

f. Film: "Nicky"

g. Film: "No Two Alike"

3. Role of the resource and itinerant teacher

a. Dilemma of priorities (academic tutoring vs specialized skills)

b. National standards (American Foundation for the Blind (AFB) competency study) and identified competencies for teachers of VH students

c. Recommendations of the Northern California Ad Hoc Committee on Assessment

d. Recommendations by panel of visually handicapped adults

(1) the need for visually handicapped students to master specialized skills (i.e., typing, slate and stylus, braille reading, etc.) as prerequisites for achieving in academic areas

(2) the development of district guidelines and sequential courses of instruction for specialized skills needed by VH students

(3) intensive, appropriate career counseling

(4) an ongoing program of staff development to keep abreast of the numerous technological changes in services to the visually handicapped.

4. Current research relative to supportive services provided by resource and itinerant teachers to regular classroom teachers.
   a. Moore/Peabody study of the itinerant teacher role in Pennsylvania (actual duties performed, student characteristics, allocation of time to various teacher functions, skills being taught to VH students)
   b. Spungin study (national AFB study) of teacher role (developing competencies for teachers of VH students, competency areas and goals, reactions of teachers to the competencies in terms of importance and time allocation, and student characteristics).
   c. Results of Los Angeles surveys of resource and itinerant teachers and of classroom teachers working with visually handicapped students
   d. Conclusions of research studies
   e. Concerns resulting from research studies
5. Communication and conference techniques with administrators, classroom teachers, and key personnel of regular schools
   a. Active listening techniques
   b. Conference techniques and communication skills
   c. Initial conference suggestions for resource and itinerant teachers to introduce VH program
   d. Barriers to communication
   e. Establishing and maintaining communication between classroom teacher and resource and/or itinerant teacher
   f. Simulation activities

g. Self-evaluation of conference and communication behavior

6. Educational implications of visual disabilities and services of low vision clinics

(This course component was eliminated due to high scores by resource and itinerant teachers on this section of the objective test of knowledge. The following films were shown as suggestions for use in regular schools):

a. "Dimensions of Life"

b. "Not Without Sight"

c. "More Than Light and Shadow"

d. "The Blind Who Can See"

7. Organization and implementation of resource and itinerant programs for VH students

a. Public relations role

b. Organizational forms, notes to teachers, and check lists

c. Making appropriate referrals to community and private agencies

d. Systematic observation and record keeping techniques

8. Assisting the classroom teacher in making necessary modifications of the regular program to meet the needs of both regular and VH students

a. Maintaining realistic expectations for the VH student

b. Structuring the physical environment to meet the needs of the VH student

c. Structuring content, activities and materials to meet needs of both regular and VH students

d. Encouraging tactile exploration and direct "hands-on" learning experiences

e. Review of literature and development of written guidelines for classroom teachers

9. Assisting the classroom teacher in adapting curriculum materials for VH students in mainstreamed classes
   a. Necessity for making curricular adaptations
   b. Guidelines for making adaptations
   c. Guidelines for including VH students in discussion activities
   d. Guidelines for describing pictures to VH students
   e. Social studies adaptations: MAVIS - Materials Adaptations for Visually Impaired Students in the Social Studies (adaptation process, sourcebooks, demonstration lessons, and making actual adaptations)
   f. Science adaptations: SAVI - Science Activities for the Visually Impaired (curriculum development process, communication module overview, measurement module overview, specific communication and measurement experiments, models for implementation)
   g. Science mainstreaming film: "Fulfillment of Human Potential"
   h. Physical Education adaptations (review of literature and development of written guidelines for classroom and Physical Education teachers who have VH students in their classes)
   i. Physical Education mainstreaming films: "Out of Left Field" and "Physical Education for Blind Children"
10. Facilitating acceptance of VH students into regular programs
   a. Techniques of fostering self-acceptance by VH students
   b. Techniques of facilitating acceptance by peers
   c. Providing for participation of VH students in classroom activities which normally require vision

d. Involving VH students in meaningful participation in class, extracurricular, and special activities

e. Review of literature and development of written guidelines for classroom teachers

f. Mainstreaming films demonstrating social acceptance: "Still the Same Person," and "Elizabeth"

11. Resources for selection, acquisition and utilization of specialized materials and equipment

a. Key sources of specialized reading materials (braille, large print and recorded format and equipment)

b. State, regional and national clearinghouses

c. Volunteer transcribing groups and other volunteer services

d. Commercial microfilm companies

e. Use of sighted readers

12. Assessment of mainstreamed VH students (taught by guest speaker, Dr. Rose-Marie Swallow)

a. Specialized areas in which VH students should be assessed

b. Determining pupil performance level through formal, informal and functional assessment procedures

c. Introduction to a variety of instruments appropriate for assessing VH students in specific areas

Evaluation of Inservice Class by Participants. At the last session of the inservice class, participants were asked to complete a two-page course evaluation form. (See Appendix K). There were eight items for which participants were asked to circle the appropriate numbers on a scale from 1 to 8 (8 = excellent). In addition, there were eight questions concerned with respondents' opinions of the strengths and weaknesses of the course.

INSTRUMENTATION

For purposes of this study, a handbook of materials was developed for resource and itinerant teachers participating the the inservice course. The handbook (available as a separate report) included materials developed by the Project Director, class members, and other sources, as noted.

In addition, the four following specially designed instruments were used to collect data:

1. The "Survey of Teacher Needs: Working with Visually Handicapped Students" (see Appendix A) was a self-evaluation of skills in meeting needs of VH students, completed by classroom teachers who had visually handicapped students enrolled in their classes, as well as an evaluation of supportive services provided by resource and itinerant teachers.

2. The "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers" (see Appendix G) was a self-evaluation, completed by resource and itinerant teachers of supportive services provided to classroom teachers.

3. The objective test of knowledge (see Appendix J) was a factual test, relative to providing supportive services, completed by resource and itinerant teachers.

4. The "Inservice Course Evaluation Form" (see Appendix L) was an evaluation of the inservice class, completed by participants in the class.

The two surveys were developed in the following manner:

1. An extensive review of the literature was conducted. This resulted in many lists of competencies of resource and itinerant teachers of the visually handicapped, but the competencies were general competencies, not specifically related to providing supportive services to classroom teachers who work with visually handicapped students. The review of the

literature failed to locate any competencies specifically enumerated for classroom teachers who work with VH students.

2. Competencies from the literature were listed, then grouped into major areas, combined and extensively edited.

3. The project consultant helped to consolidate and critique competencies listed in the survey.

4. The instrument was critiqued and validated by authorities in the field of education of the visually handicapped, including representation from the school district, university, and State Department of Education.

5. Visually handicapped adults (graduates of the Los Angeles Unified School District program for visually handicapped students) critiqued and validated the instrument.

6. The project statistician and the chairman of the Research Approvals Committee, Research and Evaluation Branch, Los Angeles Unified School District, suggested additional modifications to facilitate data collection and analysis.

7. The "Survey of Teacher Needs: Working with Visually Handicapped Students" was field tested with a group of elementary school teachers in Los Angeles and a group of high school teachers in Sacramento.

The second survey, "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers" is identical to the first survey except for some minor changes in wording.

The objective test of knowledge was developed in the following manner:

1. The Project Consultant assisted in procuring various tests utilized in teacher training programs.

2. Textbooks used in teacher training programs for the visually handicapped were reviewed.

3. Publisher-developed tests concerned with teachers of the visually handicapped were reviewed.

4. Tests from courses taught at California State University, Los Angeles, in the visually handicapped area of the teacher training program were reviewed.

5. Test items were listed, grouped into major areas, combined and extensively edited.

6. New test items were developed based on current legislation, curricular and technological developments, and areas identified in the two surveys.

The "Inservice Course Evaluation Form" (see Appendix K) consisted of the standard form used by the Division of Special Education. In addition, a review of evaluation instruments in the literature resulted in the development of specific open-ended items relative to strengths and weaknesses of the course.

DATA COLLECTION PROCESS

The classroom teacher survey ("Survey of Teacher Needs: Working With Visually Handicapped Students") was sent as a pre-test to half of the classroom teachers (chosen at random) who had visually handicapped students enrolled in their classes during the Fall semester. The survey was sent as a post-test to all of the classroom teachers whose classes contained visually handicapped students during the Spring semester. Accordingly, the pre-test survey was sent in January to 292 teachers in 83 schools; the post-test survey was sent in May to 481 teachers in 96 schools.

Since the total number of Visually Handicapped program staff was small, both the January pre-test and the May post-test of the "Survey of Resource and Itinerant Teachers: Providing Supportive Services to

Classroom Teachers" were sent to all 18 resource teachers, 15 itinerant teachers and 5 administrative/advisory program personnel.

The objective test of knowledge was administered as both pre-test and post-test to the 38 Visually Handicapped program personnel (experimental and control groups).

During the last class meeting of the inservice course, all 20 class participants were asked to complete the "Inservice Course Evaluation."

DATA ANALYSIS

The data from the evaluation instruments were analyzed by the statistical procedures of (1) analysis of variance, utilizing the Scheffé procedure, (2) unpaired t-tests, and (3) paired t-tests.

Data from surveys completed by classroom teachers relating to the first two hypotheses were analyzed by use of unpaired t-tests. The independent variable was the treatment (one control and one experimental group). The dependent variable for the first hypothesis was the classroom teacher self-evaluation of his/her skills in meeting the needs of visually handicapped students. The dependent variable for the second hypothesis was the classroom teacher evaluation of the level of service provided by the resource or itinerant teacher.

In addition, analysis of variance and the Scheffé procedure were used to determine differences in the level of classroom teacher skills among groups of teachers by teaching level, prior experience teaching visually handicapped students, feelings about working with a VH student, and type of supportive services.

Data from surveys completed by resource and itinerant teachers, relating to the third hypothesis, were analyzed by unpaired t-tests. The independent variable was the treatment (one control and one exper-

imental group). The dependent variable for the third hypothesis was the resource and itinerant teacher self-evaluation of his/her skills in providing supportive services to classroom teachers.

Data from tests completed by resource and itinerant teachers, relating to the fourth hypothesis, were analyzed by paired t-tests. This statistical test was used due to the fact that there were related samples (pre-test and post-test of test of knowledge for the fourth hypothesis). The independent variable was the treatment (one control and one experimental group). The dependent variable for the fourth hypothesis was the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers.

In addition, analysis of variance and the Scheffe procedure were used to determine differences in the level of supportive services provided to classroom teachers among groups of resource and itinerant teachers by type of supportive services (resource or itinerant), teaching level of resource teachers, type of school in which itinerant teachers worked (regular or Special Education), and amount of experience teaching the visually handicapped.

Unpaired t-tests were used to test for any differences between the experimental and control groups on the pre-test for all four hypotheses. Differences on the pre-test were considered significant at the .20 level. The purpose of this high level was to avoid making a Beta error (assuming no differences between groups when differences actually did exist). If differences had been found, analysis of covariance would have been used to test the effect of the treatment. Since no differences were found on the pre-tests, it was not necessary to use analysis of covariance. Differences on the post-test were considered significant at the .05 level. After analysis of the data, conclusions and recommendations were formulated

relative to staff development needs for classroom teachers who have visually handicapped students enrolled in their classes and for resource and itinerant teachers who provide supportive services to classroom teachers.

PROJECT PERSONNEL

Project staff consisted of a full-time project director, Dr. Joy Efron; half-time clerk-typist, Sharon Henderson; consultant (6 days), Dr. Rose-Marie Swallow; and statistician (6 days), Dr. Richard Reed.

RETURNS

Information about returns of surveys, tests and inservice evaluations is presented in Table 4.

Survey of Classroom Teachers

Pre-Test. The survey of classroom teachers was sent as a pre-test in January, 1980 to 292 classroom teachers and was returned by 139 teachers (48%). Of the 139 returns, 63 were in the experimental group (45%); 72 were in the control group (52%); and 4 were not identified by group (3%).

13 teachers were Special Education teachers (9%); 25 were elementary teachers (18%); 61 were junior high school teachers (44%); 39 were senior high school teachers (28%); and one had no identification of teaching level (1%).

58 teachers reported that this was their first experience with a VH student (42%); 79 reported previous experience teaching VH students (57%); and 2 did not indicate amount of experience (1%).

Table 4

Percentage of Returns of Surveys and Evaluation Instruments by Groups

Instrument		Number Sent	Returns							
			Experimental		Control		Unidentified		Total	
			n	Percent of Returns	n	Percent of Returns	n	Percent of Returns	n	Percent of Total Surveys Sent
Survey of Classroom Teachers	Pre-test	292	63	45%	72	52%	4	3%	139	48%
	Post-test	481	82	36%	113	49%	35	15%	230	48%
Survey of Resource & Itinerant Teachers	Pre-test	38	17	49%	16	46%	2	6%	35	92%
	Post-test	38	17	49%	15	43%	3	9%	35	92%
Objective Test of Knowledge	Pre-test	38	19	61%	12	39%	0	0	31	82%
	Post-test	38	17	59%	12	41%	0	0	29	76%
Inservice Course Evaluation		20	19	100%	0	0	0	0	19	95%

81 teachers indicated that their VH student was a positive experience (58%); 10 teachers indicated that their VH student was not a positive experience (7%); 41 teachers were uncertain (29%) and 7 teachers did not respond to the question (5%).

Post-Test. The same survey was sent as a post-test in May, 1980 to 481 classroom teachers and was returned by 230 teachers (48%). Of the 230 returns, 82 were in the experimental group (36%); 113 were in the control group (49%); and 35 could not be identified by group (15%) and were discarded.

18 teachers were Special Education teachers (9%); 38 were elementary teachers (20%); 81 were junior high school teachers (42%); 50 were senior high school teachers (26%); and 8 had no identification of teaching level (4%).

89 teachers reported that this was their first experience with a VH student (46%); 96 reported previous experience teaching VH students (49%); and 10 did not indicate amount of experience (5%).

118 teachers indicated that their VH student was a positive experience (61%); 26 teachers indicated that their VH student was not a positive experience (13%); 38 teachers were uncertain (20%); and 13 teachers did not respond to the question (7%).

Survey of Resource and Itinerant Teachers

Pre-Test. The survey of resource and itinerant teachers was sent as a pre-test in January, 1980 to 38 resource and itinerant teachers and administrative/advisory staff of the Visually Handicapped program. Surveys were returned by 35 people (92%). Of the 35 returns, 17 were in the experimental group (49%); 16 were in the control group (46%); and 2 were not identified by group (6%).

15 teachers were resource teachers (43%); 15 were itinerant teachers (43%); and 5 surveys were returned by administrative/advisory staff (14%).

Teaching level was indicated by 16 respondents: 2 taught Special Education (13%); 2 taught a resource room at the elementary level (13%); 5 taught at the junior high level (31%); and 7 taught at the senior high level (44%).

19 respondents had itinerant teaching experience: 2 worked in Special Education schools (11%) and 17 worked in regular schools (89%).

6 teachers had taught visually handicapped students 1-3 years (17%); 10 had taught 4-8 years (29%); 12 had taught 9-14 years (34%); 5 had taught 15 years or more (14%); and 2 did not indicate length of teaching experience (6%).

Post-Test. The same survey was sent as a post-test in May, 1980 to the same 38 people. Surveys were returned by 35 people (92%). Of the 35 returns, 17 were in the experimental group (49%); 15 were in the control group (43%); and 3 were not identified by group (9%).

15 teachers were resource teachers (43%); 15 were itinerant teachers (43%); and 5 surveys were returned by administrative/advisory staff (14%).

Teaching level was indicated by 16 respondents: 2 taught Special Education (13%), 2 taught a resource room at the elementary level (13%); 5 taught at the junior high level (31%); and 7 taught at the senior high level (44%).

19 respondents had itinerant teaching experience: 2 worked in Special Education schools (11%) and 17 worked in regular schools (89%).

6 teachers had taught visually handicapped students 1-3 years (18%); 10 had taught 4-8 years (3%); 12 had taught 9-14 years (36%); and 5 had

taught 15 years or more (15%). Two respondents did not indicate the amount of teaching experience.

Objective Test of Knowledge

Pre-Test. 38 resource and itinerant teachers and 5 administrative/ advisory staff were requested to take the test of knowledge as a pre-test in February, 1980. 31 tests (82%) were returned. Of the 31 returns, 19 were in the experimental group (61%) and 12 were in the control group (39%).

Post-Test. The same 38 people were requested to take the same test of knowledge as a post-test in May, 1980. 29 tests were returned (76%). Of the 29 returns, 17 were in the experimental group (59%) and 12 were in the control group (41%).

Inservice Evaluation

The 20 participants in the inservice class were requested to complete the course evaluation at the last class session. Evaluation forms were returned by 19 people (95%). All 19 returns were in the experimental group.

Chapter 3

RESULTS

INTRODUCTION

This chapter presents (1) results of statistical analysis relating to the four research hypotheses, (2) results of supplementary analysis of classroom teacher skills and supportive services provided by resource and itinerant teachers, (3) subjective written comments by classroom teachers, and (4) evaluation of the inservice class by participants.

Hypotheses were tested concerning the effectiveness of an inservice training program for resource and itinerant teachers of the visually handicapped. The experimental group consisted of nine resource teachers and eight itinerant teachers who attended the 32-hour inservice class, as well as classroom teachers who received supportive services from the experimental group of resource and itinerant teachers. The control group consisted of nine resource teachers and seven itinerant teachers who did not attend the inservice class, as well as classroom teachers who received supportive services from the control group of resource and itinerant teachers. Each resource and itinerant teacher provided supportive services to approximately 20 classroom teachers.

Four hypotheses were tested relative to the two groups. The four hypotheses were:

1. There are no significant differences in levels of classroom

teacher skills in meeting specific needs of visually handicapped students integrated into regular classes between (1) regular teachers who received supportive services of resource and itinerant teachers who participated in an inservice program, and (2) regular teachers who received supportive services of resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations completed by classroom teachers.

2. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by evaluations completed by classroom teachers.

3. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations of resource and itinerant teachers.

4. There are no significant changes in the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers, as measured by written tests administered prior to and subsequent to participation in an inservice program.

Each of the first three hypotheses was statistically analyzed in five areas of the criterion variable: Expectations, Counseling and Guidance, Facilitating Acceptance, Teaching Methods, and all areas combined. The fourth hypothesis was statisically analyzed in eight areas: Legislation, Teacher Role/Research, Educational Implications of Visual Limitations, Resources, Specialized Skills, Assessment, Facilitating Acceptance/Modifying the Regular Program, and all areas combined.

visually handicapped student, and type of supportive services. Self-evaluations of supportive services by resource and itinerant teachers were statistically analyzed by type of supportive services, teaching level of resource teachers, type of school in which itinerant teachers worked, and years of experience teaching the visually handicapped.

Surveys were administered as a pre-test and a post-test to classroom teachers and to resource and itinerant teachers. The test of knowledge was administered as pre-tests and post-tests to resource and itinerant teachers. Pre-tests had three major purposes:

(1) to identify teacher needs for development of the inservice program;

(2) to act as a control for the study by identifying any differences between experimental and control groups prior to implementation of the inservice program; and

(3) to identify any possible interactions other than the treatment which might account for differences between groups of teachers.

Differences between control and experimental groups were analyzed by t-tests. Four sets of t-tests were performed for each hypothesis:

(1) differences between control and experimental groups on the pre-test;

(2) differences between control and experimental groups on the post-test;

(3) differences between pre- and post-tests for the control group; and

(4) differences between pre- and post-tests for the experimental group.

Differences among teachers, grouped according to characteristics other than the experimental treatment, were analyzed by analysis of variance, utilizing the Scheffé procedure, and by t-tests.

Additionally, classroom teacher skills and supportive services, as evaluated by classroom teachers, were statistically analyzed by groups of classroom teachers according to teaching level, prior experience teaching visually handicapped students, feelings about working with a

FIRST HYPOTHESIS: CLASSROOM TEACHER SKILLS (SELF-EVALUATIONS)

The first hypothesis concerned the level of classroom teacher skills, as measured by self-evaluations, in meeting specific needs of visually handicapped students integrated into regular classes. Pre-test and post-test surveys of classroom teachers were analyzed to determine whether or not there were significant differences in skills between (1) classroom teachers receiving supportive services from the control group of resource and itinerant teachers and (2) classroom teachers receiving supportive services from the experimental group of resource and itinerant teachers.

The independent variable was the treatment (one control and one experimental group). The dependent variable was the classroom teacher self-evaluation of his/her skills in meeting the needs of visually handicapped students.

Information concerning differences between self-evaluations of control and experimental groups of classroom teachers is presented in Tables 5 through 7.

There were no significant differences between control and experimental groups on any area of the pre-test (see Table 5).

On the post-test, classroom teachers in the experimental group had a better self-evaluation than classroom teachers in the control group in

Table 5

Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Classroom Teachers on the Pre-Test Survey

Areas of Survey	Groups				F	P*
	Control (n=72)		Experimental (n=64)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.93	.84	3.08	.91	1.17	ns
Counseling & Guidance	2.86	.88	2.77	.91	1.06	ns
Facilitating Acceptance	2.39	.98	2.38	.83	1.38	ns
Teaching Methods	2.70	.85	2.73	.86	1.02	ns
Total Survey (All Areas Combined)	2.75	.81	2.81	.82	1.01	ns

*Level of significance was .20. The purpose of this high level was to avoid making a Beta error (assuming there was no difference on the pre-test between groups when there actually was a difference).

Table 6

Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Classroom Teachers on the Post-Test Survey

Areas of Survey	Groups				F	P
	Control (n=81)		Experimental (n=111)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.96	.96	2.64	.76	1.60	.05[a]
Counseling & Guidance	2.94	1.02	2.66	.86	1.41	ns
Facilitating Acceptance	2.50	1.06	2.30	.95	1.24	ns
Teaching Methods	2.69	.99	2.53	.90	1.22	ns
Total Survey (All Areas Combined)	2.79	.92	2.55	.79	1.38	ns

[a]Classroom teachers in the experimental group had a significantly better self-evaluation than classroom teachers in the control group.

Table 7

Unpaired t-Test Scores for Post-test - Pre-test Differences in Self-Evaluations of Control and Experimental Groups of Classroom Teachers

Area of Teacher Skills	Groups			
	Control (pre-test n= 72) (post-test n= 81)		Experimental (pre-test n= 64) (post-test n=111)	
	t	P	t	P
Expectations	.22	ns	3.15	.01[a]
Counseling and Guidance	.55	ns	.72	ns
Facilitating Acceptance	.28	ns	.53	ns
Teaching Methods	.07	ns	1.35	ns
All Classroom Teacher Skill Areas Combined	.31	ns	1.91	ns

[a]Self-evaluations of classroom teachers in the experimental group improved, significant at the .01 level.

the area of Expectations, significant at the .05 level (see Table 6), and the null hypothesis was rejected.

In the control group of classroom teachers, there were no significant differences between pre-tests and post-tests (see Table 7).

In the experimental group of classroom teachers, self-evaluations improved in the area of Expectations, significant at the .01 level (see Table 7).

SECOND HYPOTHESIS: SUPPORTIVE SERVICES PROVIDED BY RESOURCE AND ITINERANT TEACHERS (EVALUATED BY CLASSROOM TEACHERS)

The second hypothesis concerned the level of supportive services provided by resource and itinerant teachers to classroom teachers, as measured by evaluations completed by classroom teachers. Pre-test and post-test evaluations of supportive services, completed by classroom teachers, were analyzed to determine whether or not there were significant differences in supportive services provided by (1) resource and itinerant teachers in the control group, and (2) resource and itinerant teachers in the experimental group.

The independent variable was the treatment (one control and one experimental group). The dependent variable was the classroom teacher evaluation of the level of service provided by resource and itinerant teachers.

Information concerning differences between evaluations of supportive services by control and experimental groups of classroom teachers is presented in Tables 8 through 10.

There were no significant differences between control and experimental groups in any area of either the pre-test or the post-test (see Tables 8 and 9). The null hypothesis was not rejected due to the lack of

Table 8

Unpaired t-Test Scores for Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers on the Pre-Test Survey

Areas of Survey	Groups				F	P*
	Control (n=63)		Experimental (n=60)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.59	1.07	2.80	1.14	1.13	ns
Counseling & Guidance	2.45	1.18	2.62	1.12	1.12	ns
Facilitating Acceptance	2.42	1.05	2.62	1.06	1.03	ns
Teaching Methods	2.46	1.07	2.66	1.17	1.06	ns
Total Survey (All Areas Combined)	2.50	1.03	2.72	1.05	1.04	ns

*Level of significance was .20. The purpose of this high level was to avoid making a Beta error (assuming there was no difference on the pre-test between groups when there actually was a difference).

Table 9

Unpaired t-Test Scores for Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers on the Post-Test Survey

Areas of Survey	Groups				F	P
	Control (n=105)		Experimental (n=78)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.73	1.20	2.66	1.17	1.05	ns
Counseling & Guidance	2.56	1.23	2.55	1.17	1.11	ns
Facilitating Acceptance	2.65	1.26	2.58	1.23	1.05	ns
Teaching Methods	2.52	1.28	2.63	1.28	1.01	ns
Total Survey (All Areas Combined)	2.63	1.17	2.62	1.16	1.02	ns

Table 10

Unpaired t-Test Scores for Post-test - Pre-test Differences in Evaluation of Supportive Services by Control and Experimental Groups of Classroom Teachers

Areas of Supportive Services	Groups			
	Control (pre-test n=63) (post-test n=105)		Experimental (pre-test n=60) (post-test n= 78)	
	t	P	t	P
Expectations	.78	ns	.70	ns
Counseling and Guidance	.55	ns	.35	ns
Facilitating Acceptance	1.18	ns	.20	ns
Teaching Methods	.31	ns	.14	ns
All Areas of Supportive Services Combined	.75	ns	.58	ns

significant differences between treatment groups.

There were no significant changes between pre-tests and post-tests in evaluations of supportive services by either control or experimental groups (see Table 10).

THIRD HYPOTHESIS: SUPPORTIVE SERVICES PROVIDED BY RESOURCE AND ITINERANT TEACHERS (SELF-EVALUATIONS)

The third hypothesis concerned the level of supportive services provided by resource and itinerant teachers to classroom teachers, as measured by self-evaluations of resource and itinerant teachers. Pre-test and post-test surveys of resource and itinerant teachers were analyzed to determine whether or not there were significant differences in supportive services provided by (1) resource and itinerant teachers in the control group, and (2) resource and itinerant teachers in the experimental group.

The independent variable was the treatment (one control and one experimental group). The dependent variable was the resource and itinerant teacher self-evaluation of his/her skills in providing supportive services to classroom teachers.

Information concerning differences between self-evaluations of control and experimental groups of resource and itinerant teachers is presented in Tables 11 through 13.

There were no significant differences between control and experimental groups in any area of either the pre-test or the post-test (see Tables 11 and 12), and the null hypothesis was not rejected.

Despite the lack of significance between groups, self-evaluations in the experimental group improved in three areas and in all areas of supportive services combined. Improvement was significant at the .01 level in the area of Teaching Methods and in all areas of supportive

Table 11

Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Resource and Itinerant Teachers on the Pre-Test Survey

Areas of Survey	Groups				F	P*
	Control (n=16)		Experimental (n=17)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.18	.38	2.29	.53	1.96	ns
Counseling & Guidance	2.45	.70	2.58	.78	1.25	ns
Facilitating Acceptance	2.68	.81	2.67	.78	1.06	ns
Teaching Methods	2.20	.65	2.48	.55	1.39	ns
Total Survey (All Areas Combined)	2.31	.55	2.47	.52	1.11	ns

*Level of significance was .20. The purpose of this high level was to avoid making a Beta error (assuming there was no difference on the pre-test between groups when there actually was a difference).

Table 12

Unpaired t-Test Scores for Self-Evaluation of Control and Experimental Groups of Resource and Itinerant Teachers on the Post-Test Survey

Areas of Survey	Groups				F	P
	Control (n=15)		Experimental (n=19)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.11	.44	2.06	.42	1.10	ns
Counseling & Guidance	2.15	.57	1.97	.57	1.02	ns
Facilitating Acceptance	2.51	.62	2.22	.50	1.55	ns
Teaching Methods	2.24	.59	1.97	.45	1.73	ns
Total Survey (All Areas Combined)	2.23	.48	2.03	.37	1.72	ns

Table 13

Unpaired t-Test Scores for Post-test - Pre-test Differences in Self-Evaluations of Control and Experimental Groups of Resource and Itinerant Teachers

Areas of Supportive Services	Groups			
	Control (pre-test n=16) (post-test n=15)		Experimental (pre-test n=17) (post-test n=19)	
	t	P	t	P
Expectations	.46	ns	1.39	ns
Counseling and Guidance	1.27	ns	2.58	.05[a]
Facilitating Acceptance	.68	ns	2.25	.05[a]
Teaching Methods	.17	ns	2.94	.01[b]
All Areas of Supportive Services Combined	.42	ns	2.81	.01[b]

[a]Self-evaluations of resource and itinerant teachers in the experimental group improved, significant at the .05 level.

[b]Self-evaluations of resource and itinerant teachers in the experimental group improved, significant at the .01 level.

services combined. Improvement was significant at the .05 level in the areas of Counseling and Guidance, and Facilitating Acceptance (see Table 13). There were no changes in self-evaluations in the control group.

FOURTH HYPOTHESIS: FACTUAL KNOWLEDGE OF RESOURCE AND ITINERANT TEACHERS (OBJECTIVE TEST)

The fourth hypothesis concerned the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers. An objective-type test (Appendix J) was administered to control and experimental groups of resource and itinerant teachers prior to the start and at the conclusion of the inservice program. Pre-tests and post-tests were analyzed to determine whether or not there were significant changes in the level of knowledge of resource and itinerant teachers for (1) the control group of resource and itinerant teachers and/or (2) the experimental group of resource and itinerant teachers.

Seven areas of knowledge were tested and analyzed through the use of paired t-tests. The independent variable was the treatment (one control and one experimental group). The dependent variable was the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers.

Information concerning differences in factual knowledge between control and experimental groups of resource and itinerant teachers is presented in Tables 14 through 18.

On the pre-test, there were no significant differences between control and experimental groups for six of the seven areas or on the total (all areas combined). However, in the area of Facilitating Acceptance/ Modifying the Regular Program, the experimental group scored higher than the control group, significant at the .05 level (see Table 14).

Both groups did better in the area of Educational Implications of Visual Limitations than in any other area (see Table 15).

On the post-test, resource and itinerant teachers in the experimental group scored significantly higher than resource and itinerant teachers in the control group for four areas and for the total post-test (all areas combined). The experimental group scored higher than the control group, significant at the .01 level, in the areas of Legislation, Teacher Role/Research, Facilitating Acceptance/Modifying the Regular Program, and the total test (all areas combined). The experimental group scored higher than the control group, significant at the .05 level, in the area of Resources (see Table 16). The null hypothesis was rejected due to the significant differences between groups.

The best areas for the experimental group were Specialized Skills (92% correct responses) and Facilitating Acceptance (89% correct responses); the weakest area was Resources (57% correct responses). The best areas for the control group were Specialized Skills (81% correct responses) and Educational Implications of Visual Limitations (76% correct responses); the weakest area was Resources (41% correct responses). (See Table 17.)

In the control group, there was one significant difference between pre-tests and post-tests. In the area of Facilitating Acceptance/Modifying the Regular Program, factual knowledge improved, significant at the .05 level. There were no significant differences for the control group in any other area or in the total test (all areas combined). (See Table 18).

In the experimental group, there were six significant differences between pre-tests and post-tests. Factual knowledge improved in six areas and in all areas of knowledge combined. Improvement was significant at the .01 level for the total test (all areas combined) and in the areas of Legislation; Teacher Role/Research; Specialized Skills; Assessment;

Table 14

Unpaired t-Test Scores for Differences in Level of Knowledge of Control and Experimental Groups on the Objective Written Pre-Test

Areas of Test	Possible Points	Control (n=12)		Experimental (n=19)		t	P
		Mean	Standard Deviation	Mean	Standard Deviation		
Legislation	21	10.50	2.47	9.79	2.59	.76	ns
Teacher Role/ Research	14	6.25	2.96	6.16	2.01	.10	ns
Vision Implications	25	18.58	2.11	17.21	3.19	1.32	ns
Resources	18	8.08	2.47	7.74	1.97	.43	ns
Specialized Skills	7	5.17	2.44	4.58	2.46	.65	ns
Assessment	8	2.67	1.61	3.58	2.59	-1.08	ns
Facilitating Acceptance/ Program Modifications	7	3.42	1.78	4.63	1.42	-2.09	.05
Total Test (All Areas Combined)	100	54.67	9.05	53.68	7.45	.33	ns

Table 15

Means and Percentages of Correct Responses by Groups of Resource and Itinerant Teachers on the Objective Test of Knowledge on the Pre-Test

Groups	n	Areas of Test															
		Legislation		Teacher Role/ Research		Vision Implications		Resources		Specialized Skills		Assessment		Facilitating Acceptance/ Program Modification		Total Test (All Areas Combined)	
		Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%
Treatment																	
Experimental	19	9.79	47%	6.16	44%	17.21	69%	7.74	43%	4.58	65%	3.58	45%	4.63	66%	53.68	54%
Control	12	10.50	50%	6.25	45%	18.58	74%	8.08	45%	5.17	74%	2.67	33%	3.42	49%	54.67	55%
Type of Program																	
Resource	9	10.89	52%	6.56	47%	17.11	68%	7.00	39%	5.89	84%	3.89	49%	5.22	75%	56.56	57%
Itinerant	14	9.29	44%	4.93	35%	18.36	73%	7.64	42%	4.14	59%	3.07	38%	3.57	51%	51.00	51%
Other VH Program Staff	9	10.44	50%	7.56	54%	17.67	71%	9.00	50%	4.44	63%	2.67	33%	3.67	52%	55.44	55%
Total Possible Points		21		14		25		18		7		8		7		100	

89

Table 16

Unpaired t-Test Scores for Differences in Level of Knowledge of Control and Experimental Groups on the Objective Written Post-Test

Areas of Test	Possible Points	Control (n=12)		Experimental (n=19)		t	P
		Mean	Standard Deviation	Mean	Standard Deviation		
Legislation	21	11.08	1.73	14.11	2.87	-3.29	.01
Teacher Role/ Research	14	6.50	2.15	10.17	1.47	-5.56	.01
Vision Implications	25	18.92	3.12	18.89	1.64	.03	ns
Resources	18	7.42	3.29	10.22	3.72	-2.12	.05
Specialized Skills	7	5.67	1.92	6.44	.78	-1.54	ns
Assessment	8	4.25	2.90	5.50	2.71	-1.20	ns
Facilitating Acceptance/ Program Modifications	7	4.58	2.11	6.22	.88	-2.93	.01
Total Test (All areas Combined)	100	58.42	7.99	71.56	7.72	-4.50	.01

Table 17

Means and Percentages of Correct Responses by Groups of Resource and Itinerant Teachers on the Objective Test of Knowledge on the Post-Test

Groups	n	Areas of Test															
		Legislation		Teacher Role/ Research		Vision Implications		Resources		Specialized Skills		Assessment		Facilitating Acceptance/ Program Modification		Total Test (All Areas Combined)	
		Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%
Treatment																	
Experimental	18	14.11	67%	10.17	73%	18.89	76%	10.22	57%	6.44	92%	5.50	69%	6.22	89%	71.56	72%
Control	12	11.08	53%	6.50	46%	18.92	76%	7.42	41%	5.67	81%	4.25	53%	4.58	65%	58.42	58%
Type of Program																	
Resource	9	13.33	63%	9.89	71%	18.11	72%	9.89	55%	6.44	92%	5.78	72%	6.56	94%	70.00	70%
Itinerant	13	12.92	62%	8.15	58%	19.15	77%	9.38	52%	6.23	89%	5.15	64%	5.23	75%	66.23	66%
Other VH Program Staff	8	12.38	59%	8.25	59%	19.38	78%	7.75	43%	5.63	80%	3.88	49%	5.00	71%	62.25	62%
Total Possible Points		21		14		25		18		7		8		7		100	

Table 18

Paired t-Test Scores for Post-test - Pre-test Differences in Level of Knowledge of Itinerant and Resource Teachers in Control and Experimental Groups as Measured by Objective Written Test

Areas of Test	Possible Points	Groups			
		Control (n=12)		Experimental (n=17)	
		t	P	t	P
Legislation	21	.97	ns	4.60	.01
Teacher Role/Research	14	.49	ns	6.71	.01
Vision Implications	25	.38	ns	1.55	ns
Resources	18	-.72	ns	2.29	.05
Specialized Skills	7	1.47	ns	3.14	.01
Assessment	8	1.93	ns	3.38	.01
Facilitating Acceptance/ Program Modification	7	2.54	.05	4.41	.01
Total Test (All Areas Combined)	100	1.37	ns	7.02	.01

and Facilitating Acceptance/Modifying the Regular Program. Improvement was significant at the .05 level in the area of Resources (see Table 18).

SUPPLEMENTARY ANALYSIS

Supplementary analysis was performed to determine differences among teachers, grouped according to characteristics other than the experimental treatment. Classroom teachers were requested to select the best response for each of four survey items relating to background information. Survey item 38, relating to subject specialty, was not analyzed as there were too many different responses and the number in each cell was too small. The three survey items for which analysis of variance was performed for classroom teachers were as follows:

37. What level are you presently teaching?
    a. Special Education (regardless of level)
    b. Elementary
    c. Junior High
    d. Senior High
39. Is this your first experience teaching a visually handicapped student?
    a. Yes
    b. No
40. Is the visually handicapped student in your class a positive experience for you and your other students?
    a. Yes
    b. No
    c. Uncertain

In addition, unpaired t-tests were performed on the post-test according to the type of supportive service provided (resource or itinerant).

Resource and itinerant teachers were requested to select the best response for each of four survey items relating to background information. The four survey items were as follows:

37. In what type of program for the visually handicapped are you presently teaching?
    a. Resource
    b. Itinerant
38. If you circled a. for item 37, what level are you presently teaching?
    a. Special Education (regardless of level)
    b. Elementary
    c. Junior High
    d. Senior High
39. If your circled b. for item 37, in what type of schools are you presently teaching?
    a. Regular schools
    b. Special education schools
40. Including this year, how many years have you taught visually handicapped students?
    a. 1-3
    b. 4-8
    c. 9-14
    d. 15 or more

Differences in skills of classroom teachers and in supportive services provided by resource and itinerant teachers were analyzed through the use of analysis of variance and the Scheffé procedure. Analysis was in five parts. Expectations, Counseling and Guidance, Facilitating Acceptance, Teaching Methods, and all areas combined.

Classroom Teacher Skills (Self-Evaluations)

Classroom teacher skills were analyzed to determine whether or not there were significant differences in skills between groups of classroom teachers according to teaching level, experience teaching visually handicapped students, feelings about working with a visually handicapped student, and type of supportive service provided.

Mean ratings and standard deviations for each area of self-evaluation by groups of classroom teachers are presented in Tables 19 and 20. Mean ratings for individual survey items are presented in Appendix N. On the pre-test, mean ratings for individual survey items were "Adequate" or above for 29 items; mean ratings were below adequate for 7 items (items 3-6 in the area of Expectations, items 14 and 16 in the area of Counseling and Guidance, and item 24 in the area of Teaching Methods). On the post-test, mean ratings for individual survey items were "Adequate" or above for 33 items; mean ratings were below adequate for 3 items (item 3 in the area of Expectations, and items 14 and 16 in the area of Counseling and Guidance). (See Master Data Information 1 and 2, Appendix N, and Survey Appendix A).

Teaching Level. Information concerning differences in self-evaluations between groups of classroom teachers according to teaching level is presented in Table 21.

On the pre-test, there were differences in three areas and in all areas combined. Differences were significant at the .01 level in the area of Counseling and Guidance and in all areas combined. Differences were significant at the .05 level in the areas of Facilitating Acceptance and Teaching Methods. Despite the significant differences among the group

Table 19

Mean Ratings and Standard Deviations of Self-Evaluations by Classroom Teachers for Each Area on the Pre-Test Survey

Groups		Survey Areas									
		Expectations		Counseling & Guidance		Facilitating Acceptance		Teaching Methods		Total	
	n	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Teaching Level											
Special Education	13	2.60	.77	2.28	.68	1.93	.46	2.30	.72	2.32	.60
Elementary	25	2.73	.77	2.43	.76	2.03	.69	2.36	.76	2.44	.68
Junior High	61	3.11	.93	2.99	.90	2.57	1.01	2.85	.86	2.92	.84
Senior High	39	3.08	.80	2.95	.87	2.48	.86	2.85	.85	2.89	.76
First Experience Teaching VH											
Yes	58	3.09	.76	2.87	.85	2.41	.87	2.81	.76	2.86	.72
No	79	2.88	.91	2.76	.90	2.35	.92	2.61	.88	2.68	.83
Is VH Student a Positive Experience?											
Yes	81	2.77	.77	2.58	.74	2.14	.78	2.48	.78	2.54	.71
No	10	3.90	.89	3.94	.80	3.32	1.22	3.33	1.03	3.62	.85
Uncertain	41	3.23	.75	3.01	.89	2.62	.83	3.03	.67	3.03	.65

Table 20

Mean Ratings and Standard Deviations of Self-Evaluations by Classroom Teachers for Each Area on the Post-Test Survey

Groups	n	Survey Areas: Expectations Mean	Expectations Std. Dev.	Counseling & Guidance Mean	Counseling & Guidance Std. Dev.	Facilitating Acceptance Mean	Facilitating Acceptance Std. Dev.	Teaching Methods Mean	Teaching Methods Std. Dev.	Total Mean	Total Std. Dev.
Teaching Level											
Special Education	17	2.69	.76	2.42	.76	1.94	.77	2.23	.61	2.36	.61
Elementary	38	2.38	.63	2.34	.73	1.81	.58	2.23	.80	2.24	.65
Junior High	80	3.03	.96	3.05	1.01	2.73	1.06	2.83	.97	2.91	.91
Senior High	50	2.85	.83	2.96	.92	2.47	1.00	2.70	.97	2.77	.85
First Experience Teaching VH											
Yes	88	2.82	.79	2.77	.93	2.35	.98	2.58	.86	2.65	.80
No	96	2.84	.97	2.90	1.00	2.49	1.07	2.70	1.04	2.75	.96
Is VH Student a Positive Experience?											
Yes	118	2.61	.84	2.55	.83	2.09	.86	2.33	.83	2.42	.77
No	25	3.39	.92	3.69	.96	3.44	1.22	3.47	1.01	3.48	.92
Uncertain	38	3.12	.80	3.18	.99	2.73	.85	3.01	.85	3.04	.79

Table 21

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Experience Teaching Visually Handicapped Students

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	1	1.47	1.47	2.02	ns	1	.03	.03	.04	ns
	Within	135	98.23	.73			182	144.84	.80		
Counseling & Guidance	Between	1	.38	.38	.49	ns	1	.87	.87	.92	ns
	Within	133	102.69	.77			180	168.62	.94		
Facilitating Acceptance	Between	1	.13	.13	.16	ns	1	.97	.97	.92	ns
	Within	134	108.09	.81			181	190.81	1.05		
Teaching Methods	Between	1	1.38	1.38	1.99	ns	1	.64	.64	.69	ns
	Within	135	93.70	.69			182	167.90	.92		
Total Survey (All Areas Combined)	Between	1	1.07	1.07	1.74	ns	1	.48	.48	.61	ns
	Within	135	83.37	.62			182	141.75	.78		

means, the Scheffé procedure showed that no means differed by enough to conclude that there was a significant difference between any particular groups.

On the post-test, there were differences in each area and in all areas combined. Elementary school teachers had a better self-evaluation than junior and senior high school teachers in the areas of Counseling and Guidance, Facilitating Acceptance, and in all areas combined, significant at the .001 level. Special Education teachers had a better self-evaluation than junior high school teachers in the area of Facilitating Acceptance, significant at the .001 level. Elementary school teachers had a better self-evaluation than junior high school teachers in the area of Expectations, significant at the .01 level. In the area of Teaching Methods, differences were significant at the .01 level. However, the Scheffé procedure showed that no means differed by enough in that area to conclude that there was a significant difference between any particular groups.

Experience Teaching Visually Handicapped Students. Information concerning differences in self-evaluations between groups of classroom teachers according to experience teaching visually handicapped students is presented in Table 22. There were no significant differences in any area of either the pre-test or the post-test.

Feelings About Working with a Visually Handicapped Student. Information concerning differences in self-evaluations between groups of classroom teachers according to feelings about working with a visually handicapped student is presented in Table 23.

On the pre-test, there were differences, significant at the .001 level, in each area and in all areas combined. Classroom teachers who

Table 22

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Teaching Level

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	3	4.87	1.62	2.21	ns	3	11.35	3.78	5.25	.01[b]
	Within	134	98.16	.73			181	130.38	.72		
Counseling & Guidance	Between	3	9.86	3.29	4.57	.01[a]	3	16.52	5.51	6.62	.001[c]
	Within	132	95.05	.72			178	148.17	.83		
Facilitating Acceptance	Between	3	8.17	2.72	3.55	.05[a]	3	25.75	8.58	9.76	.001[c,d]
	Within	133	102.07	.77			180	158.25	.88		
Teaching Methods	Between	3	7.18	2.39	3.52	.05[a]	3	12.15	4.05	4.86	.01[a]
	Within	134	91.23	.68			181	150.84	.83		
Total Survey (All Areas Combined)	Between	3	7.13	2.38	3.98	.01[a]	3	14.03	4.68	6.90	.001[c]
	Within	134	80.14	.60			181	122.70	.68		

[a] Although there were significant differences among the group means, the Scheffé procedure showed that no means differed by enough to conclude that there was a significant difference between any particular groups.

[b] According to Scheffé procedure, teachers at the elementary school level had a significantly better self-evaluation than teachers at the junior high level.

[c] According to Scheffé procedure, teachers at the elementary school level had a significantly better self-evaluation than teachers at the junior and senior high school levels.

[d] According to Scheffé procedure, teachers in Special Education schools and classes had significantly better self-evaluations than teachers at the junior high school level

Table 23

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Classroom Teachers Grouped According to Feelings About Working with a Visually Handicapped Student

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	2	14.66	7.33	12.30	.001[a]	2	16.65	8.32	11.64	.001[a]
	Within	129	76.84	.60			178	127.27	.72		
Counseling & Guidance	Between	2	18.64	9.32	14.85	.001[a,b]	2	32.32	16.16	20.81	.001[a]
	Within	128	80.32	.63			176	136.70	.78		
Facilitating Acceptance	Between	2	15.56	7.78	11.19	.001[a]	2	42.16	21.08	25.07	.001[a,b]
	Within	128	88.96	.70			177	148.81	.84		
Teaching Methods	Between	2	12.18	6.09	10.28	.001[a]	2	33.87	16.94	22.78	.001[a]
	Within	129	76.40	.59			178	132.34	.74		
Total Survey (All Areas Combined)	Between	2	14.07	7.03	14.16	.001[a]	2	29.08	14.54	23.07	.001[a]
	Within	129	64.08	.50			178	112.21	.63		

[a] According to Scheffé procedure, classroom teachers who responded "Yes" to the question, "Is your VH student a positive experience?" had a significantly better self-evaluation than those who responded "No" or "Uncertain."

[b] According to Scheffé procedure, classroom teachers who responded "Uncertain" to the question, "Is your VH student a positive experience?" had a significantly better self-evaluation than those who responded "No."

responded "Yes" to the question, "Is the visually handicapped student in your class a positive experience for you and your other students?" had a significantly better self-evaluation than those who responded "No" or "Uncertain." Additionally, in the area of Counseling and Guidance, classroom teachers who responded "Uncertain," had a better self-evaluation than those who responded "No."

On the post-test, there were differences, significant at the .001 level, in each area and in all areas combined. Classroom teachers who responded "Yes" to the question, "Is the visually handicapped student in your class a positive experience for you and your other students?" had a significantly better self-evaluation than those who responded "No" or "Uncertain." Additionally, in the area of Facilitating Acceptance, classroom teachers who responded "Uncertain," had a better self-evaluation than those who responded "No."

Type of Supportive Service. Information concerning differences on the post-test between self-evaluations of classroom teachers served by resource teachers and self-evaluations of classroom teachers served by itinerant teachers is presented in Table 24. There were no significant differences in any area according to type of supportive service provided to classroom teachers.

Supportive Services Provided by Resource and Itinerant Teachers (Evaluated by Classroom Teachers)

Supportive services provided by resource and itinerant teachers were analyzed to determine whether or not there were significant differences in evaluations between groups of classroom teachers according to teaching level, experience teaching visually handicapped students, feelings about working with a visually handicapped student, and type of supportive service provided.

Table 24

Unpaired t-Test Scores for Self-Evaluations of Classroom Teachers Grouped According to Type of Supportive Services (Resource or Itinerant)

Areas of Survey	Type of Supportive Service				F	P
	Itinerant (n=96)		Resource (n=94)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.81	.82	2.83	.96	1.36	ns
Counseling & Guidance	2.78	.93	2.87	1.01	1.19	ns
Facilitating Acceptance	2.46	1.04	2.38	1.00	1.08	ns
Teaching Methods	2.63	.88	2.63	1.03	1.38	ns
Total Survey (All Areas Combined)	2.69	.82	2.70	.94	1.31	ns

Table 24

Unpaired t-Test Scores for Self-Evaluations of Classroom Teachers Grouped According to Type of Supportive Services (Resource or Itinerant)

Areas of Survey	Type of Supportive Service				F	P
	Itinerant (n=96)		Resource (n=94)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.81	.82	2.83	.96	1.36	ns
Counseling & Guidance	2.78	.93	2.87	1.01	1.19	ns
Facilitating Acceptance	2.46	1.04	2.38	1.00	1.08	ns
Teaching Methods	2.63	.88	2.63	1.03	1.38	ns
Total Survey (All Areas Combined)	2.69	.82	2.70	.94	1.31	ns

Mean ratings and standard deviations for each area of evaluation of supportive services by groups of classroom teachers are presented in Tables 25 and 26. Mean ratings for individual survey items are presented in Appendix N. Mean ratings for all survey items were "Adequate" or above on both the pre-test and the post-test by all groups of classroom teachers except by those who indicated that their visually handicapped student was not a positive experience. On the post-test, ratings by elementary school teachers were "Very helpful" or better.

Teaching Level. Information concerning differences in evaluations of supportive services between groups of classroom teachers according to teaching level is presented in Table 27.

There were no significant differences in any area on the pre-test.

On the post-test there were differences, significant at the .001 level, in each area and in all areas combined. Elementary school teachers had a better evaluation of supportive services than did junior and senior high school teachers.

Experience Teaching Visually Handicapped Students. Information concerning differences in evaluations of supportive services between groups of classroom teachers according to experience teaching visually handicapped students is presented in Table 28. There were no significant differences in any area of either the pre-test or the post-test.

Feelings About Working with a Visually Handicapped Student. Information concerning differences in evaluations of supportive services between groups of classroom teachers according to feelings about working with a visually handicapped student is presented in Table 29.

Table 25

Mean Ratings and Standard Deviations of Supportive Services by Classroom Teachers for Each Area on the Pre-Test Survey

Groups	n	Survey Areas									
		Expectations		Counseling & Guidance		Facilitating Acceptance		Teaching Methods		Total	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Teaching Level											
Special Education	12	2.42	.78	2.22	.98	1.98	.55	2.20	.77	2.31	.79
Elementary	23	2.20	.89	2.03	.69	2.22	.91	2.07	.83	2.14	.76
Junior High	56	2.79	1.09	2.61	1.17	2.62	1.11	2.67	1.11	2.69	1.04
Senior High	34	2.90	1.22	2.83	1.29	2.71	1.11	2.77	1.20	2.80	1.17
First Experience Teaching VH											
Yes	52	2.63	1.05	2.39	1.12	2.44	1.07	2.52	1.10	2.55	1.02
No	73	2.71	1.12	2.62	1.15	2.55	1.04	2.55	1.08	2.60	1.04
Is VH Student a Positive Experience?											
Yes	74	2.48	1.00	2.29	1.07	2.19	.86	2.24	.96	2.36	.92
No	10	3.12	1.41	3.38	1.38	3.61	1.18	3.45	1.45	3.07	1.46
Uncertain	38	2.85	1.04	2.73	1.11	2.86	1.11	2.88	1.05	2.83	1.01

Table 26

Mean Ratings and Standard Deviations of Supportive Services by Classroom Teachers for Each Area on the Post-Test Survey

Groups	n	Survey Areas									
		Expectations		Counseling & Guidance		Facilitating Acceptance		Teaching Methods		Total	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Teaching Level											
Special Education	18	2.52	1.06	2.12	.91	2.25	.87	2.12	.90	2.29	.82
Elementary	36	1.77	.84	1.79	.76	1.74	.94	1.68	.72	1.76	.75
Junior High	77	2.98	1.18	2.90	1.27	2.99	1.21	2.96	1.33	2.95	1.21
Senior High	45	2.97	1.10	2.76	1.15	2.88	1.31	2.79	1.26	2.87	1.08
First Experience Teaching VH											
Yes	82	2.57	1.12	2.43	1.15	2.50	1.13	2.50	1.21	2.52	1.10
No	92	2.78	1.23	2.64	1.22	2.70	1.34	2.57	1.31	2.69	1.19
Is VH Student a Positive Experience?											
Yes	110	2.45	1.19	2.24	1.09	2.22	1.13	2.18	1.16	2.32	1.09
No	26	3.27	1.23	3.20	1.35	3.48	1.36	3.15	1.35	3.25	1.26
Uncertain	35	2.91	.89	2.93	1.05	3.05	.98	3.07	1.10	2.97	.94

Table 27

Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Teaching Level

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	3	8.40	2.80	2.45	ns	3	41.24	13.75	11.71	.001[a]
	Within	120	137.46	1.15			172	201.87	1.17		
Counseling & Guidance	Between	3	9.91	3.30	2.65	ns	3	34.34	11.45	9.16	.001[a]
	Within	115	143.20	1.25			166	207.38	1.25		
Facilitating Acceptance	Between	3	6.67	2.22	2.08	ns	3	41.77	13.92	10.55	.001[a]
	Within	109	116.58	1.07			160	211.11	1.32		
Teaching Methods	Between	3	8.59	2.86	2.52	ns	3	43.88	14.63	10.60	.001[a]
	Within	112	127.02	1.13			162	223.56	1.38		
Total Survey (All Areas Combined)	Between	3	7.62	2.54	2.49	ns	3	39.89	13.30	11.85	.001[b]
	Within	121	123.73	1.02			172	192.99	1.12		

112

113

[a] According to Scheffé procedure, teachers at the elementary school level had significantly better evaluations of supportive services than teachers at the junior and senior high school levels.

[b] According to Scheffé procedure, teachers at the elementary school level nad significantly better evaluations of supportive services than teachers at the junior high school level.

Table 28

Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Experience Teaching Visually Handicapped Students

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	1	.19	.19	.16	ns	1	1.94	1.94	1.40	ns
	Within	122	145.67	1.19			172	239.07	1.39		
Counseling & Guidance	Between	1	1.49	1.49	1.15	ns	1	1.69	1.69	1.20	ns
	Within	117	151.53	1.30			165	233.51	1.42		
Facilitating Acceptance	Between	1	.33	.33	.30	ns	1	1.65	1.65	1.06	ns
	Within	111	122.93	1.11			159	246.99	1.55		
Teaching Methods	Between	1	.02	.02	.02	ns	1	.19	.19	.12	ns
	Within	114	135.58	1.19			161	257.23	1.60		
Total Survey (All Areas Combined)	Between	1	.10	.10	.09	ns	1	1.29	1.29	.97	ns
	Within	123	131.25	1.07			172	288.14	1.33		

On the pre-test, there were differences in three areas and in all areas combined. In the area of Counseling and Guidance, classroom teachers who responded "Yes" to the question, "Is the visually handicapped student in your class a positive experience for you and your other students?" had a better self-evaluation than those who responded "No," significant at the .05 level. In the areas of Facilitating Acceptance and Teaching Methods, classroom teachers who responded "Yes" had better self-evaluations than those who responded "No" or "Uncertain," significant at the .001 level. In all areas combined, differences were significant at .05 level. However, the Scheffé procedure showed that no means differed by enough to conclude that there was a significant difference between any particular groups.

On the post-test, there were significant differences in each area and in all areas combined. Classroom teachers who responded "Yes" had better self-evaluations than those who responded "No," significant at the .001 level in the area of Teaching Methods, and significant at the .01 level in the area of Expectations. In the areas of Counseling and Guidance, and Facilitating Acceptance, as well as in all areas combined, classroom teachers who responded "Yes" had better self-evaluations than those who responded "No" or "Uncertain, " significant at the .001 level.

Type of Supportive Service. Information concerning differences on the post-test between evaluations of supportive services by classroom teachers served by resource teachers and evaluations of supportive services by classroom teachers served by itinerant teachers is presented in Table 30. There were no significant differences in any area according to type of supportive service provided to classroom teachers.

Table 29

Analysis of Variance and Scheffé Procedure for Supportive Services as Evaluated by Classroom Teachers Grouped According to Feelings About Working with a Visually Handicapped Student

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	2	6.00	3.00	2.72	ns	2	16.91	8.46	6.51	.01[a]
	Within	118	129.92	1.10			168	218.13	1.30		
Counseling & Guidance	Between	2	10.99	5.49	4.50	.05[a]	2	24.97	12.49	9.86	.001[b]
	Within	113	138.02	1.22			161	203.84	1.27		
Facilitating Acceptance	Between	2	19.76	9.88	10.52	.001[b]	2	40.23	20.11	15.57	.001[b]
	Within	107	100.44	.94			155	200.28	1.29		
Teaching Methods	Between	2	17.04	8.52	8.09	.001[b]	2	31.84	15.92	11.40	.001[a]
	Within	111	116.86	1.05			157	219.21	1.40		
Total Survey (All Areas Combined)	Between	2	8.39	4.19	4.21	.05[c]	2	24.30	12.15	10.26	.001[b]
	Within	119	118.60	1.00			168	198.99	1.18		

[a] According to the Scheffé procedure, classroom teachers who responded "Yes" to the question, "Is your VH student a positive experience?" had significantly better evaluations of supportive services than those who responded "No."

[b] According to Scheffé procedure, classroom teachers who responded "Yes" to the question, "Is your VH student a positive experience?" had significantly better evaluations of supportive services than those who responded "No" or "Uncertain."

[c] Although there were significant differences among the group means, the Scheffé procedure showed that no means differed by enough to conclude that there was a significant difference between any particular groups.

Table 30

Unpaired t-Test Scores for Supportive Services as Evaluated by Classroom Teachers Grouped According to Type of Supportive Services (Resource or Itinerant)

Areas of Survey	Type of Supportive Service				F	P
	Itinerant (n=89)		Resource (n=92)			
	Mean	Std. Dev.	Mean	Std. Dev.		
Expectations	2.75	1.14	2.63	1.22	1.14	ns
Counseling & Guidance	2.66	1.18	2.44	1.22	1.08	ns
Facilitating Acceptance	2.79	1.21	2.47	1.28	1.13	ns
Teaching Methods	2.70	1.28	2.44	1.28	1.01	ns
Total Survey (All Areas Combined)	2.73	1.13	2.52	1.19	1.10	ns

Supportive Services Provided by Resource and Itinerant Teachers (Self-Evaluations

Supportive services provided by resource and itinerant teachers were analyzed to determine whether or not there were significant differences in self-perceptions between groups of resource and itinerant teachers according to type of supportive service (resource or itinerant), teaching level of resource teachers, type of school in which itinerant teachers worked, and years of experience teaching visually handicapped students.

Mean ratings and standard deviations for each area of self-evaluation by groups of resource and itinerant teachers are presented in Tables 31 and 32. Mean ratings for individual survey items are presented in Appendix N. On the pre-test, mean ratings for individual survey items were "Adequate" or above for 33 items; mean ratings were below adequate for 3 items (item 16 in the area of Counseling and Guidance, item 19 in the area of Facilitating Acceptance, and item 35 in the area of Teaching Methods). On the post-test, mean ratings for all survey items were "Adequate" or above; mean ratings were "Very Helpful" or above for 13 items (see Master Data Information 5 and 6, Appendix N, and Survey, Appendix G).

Type of Supportive Service. Information concerning differences in self-evaluations between groups of resource and itinerant teachers according to type of supportive service is presented in Table 33. There were no significant differences in any area between resource teachers and itinerant teachers on either the pre-test or the post-test.

Teaching Level of Resource Teachers. Information concerning differences in self-evaluations between groups of resource teachers according to teaching level is presented in Table 34. There were no significant differences in any area on either the pre-test or the post-test.

Table 31

Mean Ratings and Standard Deviations of Self-Evaluations by Resource and Itinerant Teachers for Each Area on the Pre-Test Survey

Groups		Survey Areas									
		Expectations		Counseling & Guidance		Facilitating Acceptance		Teaching Methods		Total	
	n	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Type of Program											
Resource	15	2.29	.54	2.53	.83	2.73	.69	2.30	.71	2.39	.59
Itinerant	15	2.26	.39	2.46	.59	2.63	.81	2.40	.56	2.40	.51
Resource Teacher by Teaching Level											
Special Education	2	1.78	.11	2.34	.94	2.77	.62	1.73	.15	1.99	.32
Elementary	2	2.25	.21	2.17	1.18	2.60	.00	2.17	.23	2.25	.35
Junior High	5	2.26	.50	2.83	1.14	3.40	.91	2.53	.79	2.63	.65
Senior High	7	2.42	.64	2.69	.73	2.49	.63	2.41	.78	2.46	.65
Itinerant Teacher by Type of School											
Regular	17	2.18	.38	2.49	.74	2.63	.87	2.33	.52	2.35	.50
Special Education	2	2.54	.05	2.50	.24	2.90	.42	2.87	.00	2.73	.13
Years of Experience											
1-3	6	2.20	.54	2.00	.84	2.50	1.01	2.04	.55	2.15	.60
4-8	10	1.99	.28	2.40	.54	2.33	.66	1.95	.33	2.09	.30
9-14	12	2.54	.48	2.96	.76	3.15	.68	2.88	.54	2.83	.47
15 or more	5	2.06	.12	2.30	.30	2.44	.52	2.21	.35	2.22	.27

Table 32

Mean Ratings and Standard Deviations of Self-Evaluations by Resource and Itinerant Teachers for Each Area on the Post-Test Survey

Groups	n	Survey Areas: Expectations Mean	Expectations Std. Dev.	Counseling & Guidance Mean	Counseling & Guidance Std. Dev.	Facilitating Acceptance Mean	Facilitating Acceptance Std. Dev.	Teaching Methods Mean	Teaching Methods Std. Dev.	Total Mean	Total Std. Dev.
Type of Program											
Resource	15	2.08	.46	1.90	.65	2.28	.60	1.99	.64	2.04	.50
Itinerant	16	2.15	.36	2.15	.47	2.48	.55	2.19	.44	2.21	.38
Resource Teacher by Teaching Level											
Special Education	1	1.70	-	1.17	-	2.20	-	1.50	-	1.61	-
Elementary	3	2.03	.32	1.92	.72	2.20	.35	1.83	.49	1.95	.39
Junior High	7	2.05	.39	2.00	.82	2.51	.80	2.04	.83	2.10	.64
Senior High	4	2.26	.71	1.88	.25	1.95	.25	2.17	.51	2.10	.39
Itinerant Teacher by Type of School											
Regular	14	2.11	.35	2.07	.45	2.46	.56	2.16	.45	2.17	.39
Special Education	2	2.44	.33	2.67	.23	2.60	.57	2.40	.38	2.47	.11
Years of Experience											
1-3	8	1.88	.27	1.64	.48	2.03	.43	1.70	.46	1.78	.37
4-8	6	2.18	.40	2.05	.49	2.37	.50	2.07	.30	2.12	.28
9-14	14	2.15	.51	2.24	.61	2.53	.62	2.28	.58	2.27	.46
15 or more	6	2.12	.25	2.14	.45	2.33	.59	2.19	.45	2.18	.36

Table 33

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Type of Program

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	1	.01	.01	.04	ns	1	.05	.05	.27	ns
	Within	28	6.18	.22			29	4.87	.17		
Counseling & Guidance	Between	1	.04	.04	.08	ns	1	.47	.47	1.49	ns
	Within	28	14.43	.52			29	9.24	.32		
Facilitating Acceptance	Between	1	.08	.08	.14	ns	1	.30	.30	.92	ns
	Within	28	15.77	.56			29	9.57	.33		
Teaching Methods	Between	1	.07	.07	.17	ns	1	.29	.29	.98	ns
	Within	28	11.47	.41			29	8.71	.30		
Total Survey (All Areas Combined)	Between	1	.00	.00	.00	ns	1	.23	.23	1.19	ns
	Within	28	8.51	.30			29	5.61	.19		

Table 34

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Teaching Level

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	3	.63	.21	.72	ns	3	.28	.09	.39	ns
	Within	12	3.53	.29			11	2.66	.24		
Counseling & Guidance	Between	3	.84	.28	.31	ns	3	.61	.20	.42	ns
	Within	12	10.72	.89			11	5.30	.48		
Facilitating Acceptance	Between	3	2.57	.86	1.70	ns	3	.85	.28	.73	ns
	Within	12	6.05	.50			11	4.26	.39		
Teaching Methods	Between	3	1.03	.34	.65	ns	3	.46	.15	.32	ns
	Within	12	6.27	.52			11	5.36	.49		
Total Survey (All Areas Combined)	Between	3	.66	.22	.60	ns	3	.25	.08	.29	ns
	Within	12	4.45	.37			11	3.23	.29		

Type of School. Information concerning differences in self-evaluations between groups of itinerant teachers according to the type of school in which itinerant teachers worked is presented in Table 35. There were no significant differences in any area on either the pre-test or the post-test.

Years of Experience Teaching Visually Handicapped Students

Information concerning differences in self-evaluations between groups of resource and itinerant teachers according to the amount of experience teaching visually handicapped students is presented in Table 36.

On the pre-test, there were differences in three areas and in all areas combined. Teachers with 1-8 years of experience had better self-evaluations than teachers with 9-14 years experience in the area of Teaching Methods and in all areas combined, significant at the .001 level. Teachers with 4-8 years of experience had better self-evaluations than teachers with 9-14 years of experience in the area of Expectations, significant at the .05 level. In the area of Counseling and Guidance, differences were significant at the .05 level. However, the Scheffé procedure showed that no means differed by enough in that area to conclude that there was a significant difference between any particular groups.

On the post-test, there were no significant differences in any area.

Table 35

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Itinerant Teachers Grouped According to Type of School (Regular or Special Education)

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	1	.23	.23	1.72	ns	1	.18	.18	1.44	ns
	Within	17	2.28	.13			14	1.75	.12		
Counseling & Guidance	Between	1	.00	.00	.00	ns	1	.62	.62	3.18	ns
	Within	17	8.90	.52			14	2.71	.19		
Facilitating Acceptance	Between	1	.13	.13	.18	ns	1	.03	.03	.11	ns
	Within	17	12.28	.72			14	4.43	.32		
Teaching Methods	Between	1	.53	.53	2.12	ns	1	.10	.10	.52	ns
	Within	17	4.24	.25			14	2.79	.20		
Total Survey (All Areas Combined)	Between	1	.25	.25	1.07	ns	1	.15	.15	1.10	ns
	Within	17	4.01	.24			14	1.97	.14		

Table 36

Analysis of Variance and Scheffé Procedure for Self-Evaluations of Resource and Itinerant Teachers Grouped According to Years of Experience Teaching Visually Handicapped Students

Areas of Survey	Groups	Pre-Test					Post-Test				
		df	SS	MS	F	P	df	SS	MS	F	P
Expectations	Between	3	1.89	.63	3.84	.05[a]	3	.46	.15	.87	ns
	Within	29	4.76	.16			30	5.34	.18		
Counseling & Guidance	Between	3	4.28	1.43	3.23	.05[b]	3	1.94	.65	2.22	ns
	Within	29	12.80	.44			30	8.75	.29		
Facilitating Acceptance	Between	3	4.37	1.46	2.80	ns	3	1.31	.44	1.42	ns
	Within	29	15.12	.52			30	9.28	.31		
Teaching Methods	Between	3	5.68	1.89	8.84	.001[c]	3	1.79	.60	2.43	ns
	Within	29	6.21	.21			30	7.36	.25		
Total Survey (All Areas Combined)	Between	3	3.76	1.25	6.80	.001[c]	3	1.25	.42	2.65	ns
	Within	29	5.35	.18			30	4.73	.16		

[a] According to the Scheffé procedure, resource and itinerant teachers with 4-8 years of teaching experience had significantly better self-evaluations than those with 9-14 years of teaching experience.

[b] Although there were significant differences among the group means, the Scheffé procedure showed that no means differed by enough to conclude that there was a significant difference between any particular groups.

[c] According to the Scheffé procedure, resource and itinerant teachers with 1-8 years of teaching experience had significantly better self-evaluations than those with 9 or more years of experience.

WRITTEN COMMENTS BY CLASSROOM TEACHERS ON SURVEYS

Surveys completed by classroom teachers consisted of objective rating scales. Specific comments were not requested. However, 35 classroom teachers (25% of all respondents) on the pre-test and 52 classroom teachers (27% of all respondents) on the post-test wrote specific comments. Representative written classroom teacher comments on the pre-and post-tests are found in Appendix N. Comments were classified according to the VH student, supportive services, specific suggestions and criticisms of the survey.

Comments on the Pre-Test Survey

Information concerning classification of comments by classroom teachers on the pre-test survey is presented in Table 37. One classroom teacher (experimental) indicated that visual limitations were not the student's major problem; one teacher (control) indicated that having a VH student was a negative, frustrating experience. Four respondents (one experimental and three control) indicated that supportive services were inadequate; six respondents (three experimental and three control) stated that they were unable to evaluate supportive services.

One respondent (control) indicated that inservice training was needed by classroom teachers. One teacher (experimental) indicated that the resource teacher did not have the time to do many of the things listed on the survey but should not have to do them as classroom teachers are now required to take course work in Special Education. One respondent

Table 37

Number of Written Comments on Pre-Test Survey by Classroom Teachers Served by Experimental and Control Groups of Resource and Itinerant Teachers

Categories of Comments	Groups			
	Experimental		Control	
	Resource	Itinerant	Resource	Itinerant
The VH Student				
Visual limitations were not the major problem	1	0	0	0
VH student was frustrating and/or negative experience	0	0	0	1
Supportive Services				
Supportive services were excellent	0	1	1	2
Supportive services were inadequate	2	4	2	7
Unable to evaluate supportive services	1	2	1	2
Specific Suggestions				
Classroom teachers need inservice	0	0	1	0
Miscellaneous	2	3	2	0

Table 38

Number of Written Comments on Post-Test Survey by Classroom Teachers Served by Experimental and Control Groups of Resource and Itinerant Teachers

Categories of Comments	Groups			
	Experimental		Control	
	Resource	Itinerant	Resource	Itinerant
The VH Student				
Visual limitations were not the major problem	0	1	0	2
VH student was excellent	1	0	0	0
VH student was frustrating and/or negative experience	3	1	1	1
Supportive Services				
Supportive services were excellent	0	1	0	0
Supportive services were inadequate	3	1	2	9
Unable to evaluate supportive services	1	4	2	3
Specific Suggestions				
Classroom teachers need inservice	3	0	1	0
Miscellaneous	1	1	3	0
Criticism of Survey	1	0	3	3

(experimental) indicated that itinerant teachers were not provided with sufficient time to work with each student. One teacher (control) indicated that VH students in mainstream situations become frustrated. One teacher (control) indicated that VH students in occupational training classes will never be able to work without close supervision.

Comments on the Post-Test Survey

Information concerning classification of comments by classroom teachers on the post-test survey is presented in Table 38. Three classroom teachers (one experimental and two control) indicated that visual limitations were not the student's major problem; one teacher (experimental) indicated that the VH student was excellent; six teachers (four experimental and two control) indicated that having a VH student was a negative, frustrating experience. One respondent (experimental) indicated that supportive services received were excellent; fifteen respondents (four experimental and eleven control) reported that supportive services were inadequate; ten respondents (five experimental and five control) stated that they were unable to evaluate supportive services.

Four respondents (three experimental and one control) indicated that inservice was needed by classroom teachers. One respondent (control) indicated that the regular classroom situation is overwhelming for most VH students. One respondent (experimental) indicated that mainstreaming is successful with motivated, higher level students, but not with VH students in lower classes. One respondent (control) advocated more use of note takers for visual material in the classroom. One respondent

(control) suggested that a copy of the IEP be given to regular classroom teachers.

Seven respondents (one experimental and six control) criticized the survey itself: four indicated that the amount of time required to complete the form was burdensome; one stated that questions about motivation were needed; one stated that many items were difficult to assess; one questioned the use of a survey in obtaining valid information that would prove helpful to VH students.

EVALUATION OF INSERVICE CLASS

Participants in the inservice class were requested to complete the "Inservice Course Evaluation Form" found in Appendix L. The form consisted of two sections: an objective section on which respondents were requested to rate each of eight items on a scale of 1 to 8 (8 = excellent), and a short answer section relative to strengths and weaknesses of the course.

Objective Section of Course Evaluation

Nineteen of the twenty participants completed the evaluations. Information concerning mean responses on the objective portion of the course evaluation form is presented in Table 39. Course evaluations were outstanding. Means for individual items ranged from a low of 7.22 to a high of 7.95.

Short Answer Section of Course Evaluation

The short answer section of the course evaluation form consisted of eight items. Specific responses to items are found in Appendix M.

Table 39

Ratings of Inservice Class by Participants (n=19)
on Objective Portion of Course Evaluation Form
(1=low; 8=excellent)

Item	Mean	Standard Deviation
1. Planning and organization of the course	7.95	.23
2. Leadership of the course	7.89	.46
3. Overall content of the course	7.84	.37
4. Extent to which course objectives were met	7.47	.72
5. Value of audio-visual materials	7.32	.67
6. Value of handout materials	7.53	.61
7. Personal gain in knowledge and understanding	7.63	.60
8. Practical applications for use in your own classroom	7.22	1.06

Suggestions for improving the course included:

.. extending the course (9)*

.. going into more depth (5)

.. providing more speakers (1)

.. including a session on low vision aids (1)

.. eliminating Saturday sessions (1).

All but three respondents indicated that the inservice was not long enough to adequately cover all the topics presented.

Strengths of the course included:

.. organization, planning and knowledge of the instructor (9)

.. mode of presentation and relevancy of course content (8)

.. concrete materials and handout materials (6)

.. speakers (3)

.. "hands-on" activities (3)

.. attitude and cooperation of participants (2)

.. films (1)

.. amount of material presented (1)

Weaknesses of the course included:

.. not enough time (6)

.. too much information (5)

.. lack of opportunity for "on-the-job" experimentation (2)

.. panel discussion (1)

.. previewing films (1)

.. not enough information on topics covered (1)

.. the objective test (1)

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* Numbers in parentheses indicate the number of participants who wrote those comments on the evaluation form.

Course topics for which participants wanted more information included:

.. low vision aids (6)

.. assessment (4)

.. science (SAVI) (4)

.. facilitating acceptance, social development and counseling techniques (4)

.. interpretation of medical reports (3)

.. social studies (MAVIS) (3)

.. specialized skills (3)

.. braille reading (1)

.. films (1)

.. visual perception (1)

.. abacus (1)

.. slate and stylus (1)

.. daily living skills (1)

.. scheduling techniques (1)

Course topics which participants indicated did not relate to their needs included:

.. science (SAVI) (1)

.. social studies (MAVIS) (1)

.. assessment (1)

.. severely handicapped (1)

Additional topics suggested for future inservice were:

.. interaction with classroom teachers (4)

.. counseling techniques (4)

.. methods and curriculum for teaching V.. students (2)

.. sensitivity training and interpersonal relationships (2)

.. assessment (1)

.. integration of daily living skills into the curriculum (1)

.. techniques of teaching braille reading (1)

.. visual perception (1)

.. teacher-made aids (1)

.. low vision aids and low vision clinics (1)

.. community resources (1)

.. working with parents (1)

.. working with administrators (1)

.. current literature and special programs (1)

Chapter 4

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine the effects of an inservice training program for resource and itinerant teachers on (1) skills of classroom teachers in meeting needs of visually handicapped students enrolled in their classes and (2) supportive services provided to classroom teachers by resource and itinerant teachers.

HYPOTHESES

Four null hypotheses were tested concerning the effectiveness of the inservice training course for resource and itinerant teachers in the Los Angeles Unified School District during the 1979-80 school year. Skills of classroom teachers and supportive services provided by resource and itinerant teachers were analyzed in four areas and in all areas combined. Knowledge of resource and itinerant teachers was analyzed in seven areas and in all areas combined. The hypotheses tested were:

1. There are no significant differences in levels of classroom teacher skills in meeting specific needs of visually handicapped students integrated into regular classes between (1) regular teachers who received supportive services of resource and itinerant teachers who participated in an inservice program, and (2) regular teachers who received supportive services of resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations completed by classroom teachers.

2. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by evaluations completed by classroom teachers.

3. There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations of resource and itinerant teachers.

4. There are no significant changes in the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers, as measured by written tests administered prior to and subsequent to participation in an inservice program.

Supplementary analysis of classroom teacher self-evaluations and evaluations of supportive services was performed for groups of classroom teachers according to teaching level, prior experience teaching VH students, feelings about working with a VH student and type of supportive services. Supplementary analysis of self-evaluations of supportive services was performed for groups of resource and itinerant teachers according to type of supportive service, teaching level of resource teachers, type of school in which itinerant teachers worked, and amount of experience teaching VH students.

RESEARCH DESIGN

Resource and itinerant teachers in the Los Angeles Unified School District during the 1979-80 school year were invited to participate in a program of inservice training relative to techniques of helping classroom teachers acquire skills needed to work with visually handicapped students enrolled in regular classes. Seventeen resource and itinerant teachers (the experimental group) participated in the inservice class; sixteen resource and itinerant teachers (the control group) did not participate in the inservice class.

Each resource and itinerant teacher provided supportive services to approximately 20 classroom teachers. The experimental group of classroom teachers consisted of those classroom teachers who received supportive services from resource and itinerant teachers who participated in the inservice class; the control group of classroom teachers consisted of those classroom teachers who received supportive services from resource and itinerant teachers who did not participate in the inservice class.

A needs assessment, consisting of two surveys and an objective test, all developed specifically for this study, was conducted at the end of the Fall semester to determine (1) needs of classroom teachers who had VH students enrolled in their classes, and (2) needs of resource and itinerant teachers in providing effective supportive services to classroom teachers.

Content for the inservice course was based on information from the needs assessment. The inservice training program was implemented for the experimental group of resource and itinerant teachers during

Spring, 1980. At the conclusion of the course, the surveys and test of knowledge were administered as post-tests to evaluate the effectiveness of the inservice course and to indicate future staff development needs. In addition, participants were asked to complete course evaluations.

SUMMARY OF FINDINGS

Classroom Teacher Skills (Self-Evaluations)

The first hypothesis concerned skills of classroom teachers in meeting the needs of visually handicapped students enrolled in regular classes. The hypothesis stated:

There are no significant differences in levels of classroom teacher skills in meeting specific needs of visually handicapped students integrated into regular classes between (1) regular teachers who received supportive services of resource and itinerant teachers who participated in an inservice program, and (2) regular teachers who received supportive services of resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations completed by classroom teachers.

Statistical analysis was performed for each of four areas of teacher skills as well as for the four areas combined. T-tests were performed to identify differences between experimental and control groups on both the pre-test and the post-test and to identify changes within each group from pre-test to post-test. Supplementary analysis, consisting of analysis of variance and the Scheffé procedure, was performed for groups of classroom teachers according to teaching level, prior experience teaching VH students, and feelings about

working with a VH student. Additionally, t-tests were performed to identify differences between self-evaluations of classroom teachers receiving supportive services from resource teachers and self-evaluations of classroom teachers receiving supportive services from itinerant teachers.

Summary of results is given below.

1. By Treatment. There were significant differences in self-evaluations between (1) classroom teachers in the experimental group and (2) classroom teachers in the control group.

a. Classroom teachers who received supportive services from resource and itinerant teachers who participated in the inservice class had significantly better self-evaluations in the area of Expectations than did classroom teachers who received supportive services from resource and itinerant teachers who did not participate in the inservice class.

b. Self-evaluations of the experimental group of classroom teachers improved significantly in the area of Expectations; there were no changes in the control group.

c. The null hypothesis was rejected due to significant differences in self-evaluations between experimental and control groups of classroom teachers in the area of Expectations.

2. By Teaching Level. There were significant differences in self-evaluations among classroom teachers grouped according to teaching level.

a. Elementary school teachers had significantly better self-evaluations in general and in the specific areas of Expectations, Counseling and Guidance, and Facilitating Acceptance than did junior high school teachers.

b. Elementary school teachers had significantly better self-evaluations in general and in the specific areas of Counseling and Guidance and in Facilitating Acceptance than did senior high school teachers.

c. Special Education teachers had significantly better self-evaluations in the area of Facilitating Acceptance than did junior high school teachers.

d. There were significant differences in self-evaluations among classroom teachers grouped according to teaching level in the area of Teaching Methods. However, no means differed by enough to conclude that there was a significant difference between any particular groups.

3. By Feelings. There were significant differences in self-evaluations among classroom teachers grouped according to their feelings about working with a visually handicapped student.

a. Classroom teachers who indicated positive feelings toward their VH student had significantly better self-evaluations in all areas than did classroom teachers who indicated uncertain or negative feelings.

b. Classroom teachers who indicated uncertain feelings toward their VH student had significantly better self-evaluations in the areas of Counseling and Guidance and in Facilitating Acceptance than did classroom teachers who indicated negative feelings.

4. By Experience. There were no significant differences in self-evaluations between (1) classroom teachers who had prior experience teaching visually handicapped students and (2) classroom teachers who were teaching visually handicapped students for the first time.

5. By Type of Supportive Service. There were no significant differences in self-evaluations between (1) classroom teachers who received supportive services from resource teachers and (2) classroom teachers who received supportive services from itinerant teachers.

Supportive Services Provided by Resource and Itinerant Teachers (Evaluated by Classroom Teachers)

The second hypothesis concerned supportive services provided to classroom teachers by resource and itinerant teachers. The hypothesis stated:

There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by evaluations completed by classroom teachers.

Statistical analysis was performed for each of four areas of supportive services as well as for the four areas combined. T-tests were performed to identify differences between experimental and control groups on both the pre-test and the post-test and to identify changes within each group from pre-test to post-test. Supplementary analysis, consisting of analysis of variance and the Scheffe' procedure, was performed for groups of classroom teachers according to teaching level, prior experience teaching VH students, and feelings about working with a VH student. Additionally, t-tests were performed to identify differences between evaluations of supportive services by classroom teachers receiving supportive services from resource teachers and classroom teachers receiving supportive services from itinerant teachers.

Summary of results is given below.

1. By Treatment. The null hypothesis was not rejected due to the lack of significant differences in evaluations of supportive services between experimental and control groups of classroom teachers.

2. By Teaching Level. Elementary school teachers had significantly better evaluations of supportive services provided by resource and itinerant teachers in general and in all specific areas than did junior and senior high school teachers.

3. By Feelings. There were significant differences in evaluations of supportive services among classroom teachers grouped according to their feelings about working with a visually handicapped student.

a. Classroom teachers who indicated positive feelings toward their VH student had significantly better evaluations of supportive services in general and in all specific areas than did classroom teachers who indicated negative feelings.

b. Classroom teachers who indicated positive feelings toward their VH student had significantly better evaluations of supportive services in general and in the specific areas of Counseling and Guidance, Facilitating Acceptance, and Teaching Methods than did classroom teachers who indicated uncertain feelings.

4. By Experience. There were no significant differences in evaluations of supportive services between (1) classroom teachers who had prior experience teaching visually handicapped students and (2) classroom teachers who were teaching visually handicapped students for the first time.

5. By Type of Supportive Services. There were no significant differences in evaluations of supportive services between (1) classroom

teachers who received supportive services from resource teachers and (2) classroom teachers who received supportive services from itinerant teachers.

6. Written Comments. On the pre-test, 25% of the classroom teachers wrote comments relative to supportive services instead of rating survey items on the objective scale. On the post-test, 27% of the classroom teachers wrote comments. Most of the written comments indicated that the classroom teacher did not know what to expect of a VH student, that supportive services were inadequate, and that more inservice and other assistance were needed by classroom teachers who had visually handicapped students in their regular classes.

Supportive Services Provided by Resource and Itinerant Teachers (Self-Evaluations)

The third hypothesis concerned self-evaluations of resource and itinerant teachers of supportive services provided by them to classroom teachers. The hypothesis stated:

There are no significant differences in the level of supportive services provided to regular classroom teachers by (1) resource and itinerant teachers who participated in an inservice program, and (2) resource and itinerant teachers who did not participate in an inservice program, as measured by self-evaluations of resource and itinerant teachers.

Statistical analysis was performed for each of four areas of supportive services as well as for the four areas combined. T-tests were performed to identify differences between experimental and control groups on both the pre-test and the post-test and to identify changes within each group from pre-test to post-test. Supplementary analysis, consisting of analysis of variance and the Scheffe' procedure, was

performed for groups of resource and itinerant teachers according to type of supportive service, teaching level of resource teachers, type of school in which itinerant teachers worked, and amount of experience teaching visually handicapped students.

Summary of results is given below.

1. By Treatment. The null hypothesis was not rejected due to the lack of significant differences in self-evaluations between (1) resource and itinerant teachers in the experimental group and (2) resource and itinerant teachers in the control group. However, self-evaluations of the experimental group of resource and itinerant teachers improved significantly in all areas of supportive services combined and in the specific areas of Teaching Methods, Counseling and Guidance and Facilitating Acceptance; there were no changes in the control group.

2. By Experience. Results were inconclusive relative to differences in self-evaluations among resource and itinerant teachers grouped according to amount of experience teaching visually handicapped students. There were no significant differences on the post-test, but there were significant differences on the pre-test.

a. Resource and itinerant teachers with 1-8 years of experience had significantly better self-evaluations in general and in the specific area of Teaching Methods than did resource and itinerant teachers with 9-14 years of experience.

b. Resource and itinerant teachers with 4-8 years of experience had significantly better self-evaluations in the area of Expectations than did resource and itinerant teachers with 9-14 years of experience.

c. There were significant differences in self-evaluations among resource and itinerant teachers grouped according to experience in the area of Counseling and Guidance. However, no means differed by enough to conclude that there was a significant difference between any particular groups.

3. By Teaching Level of Resource Teachers. There were no significant differences in self-evaluations among resource teachers grouped according to teaching level.

4. By Type of School in Which Itinerant Teachers Worked. There were no significant differences in self-evaluations between itinerant teachers grouped according to type of schools in which itinerant teachers worked.

5. By Type of Supportive Service. There were no significant differences in self-evaluations between resource teachers and itinerant teachers.

Factual Knowledge of Resource and Itinerant Teachers

The fourth hypothesis concerned factual knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers. The hypothesis stated:

There are no significant changes in the level of knowledge of resource and itinerant teachers relative to techniques of working with regular classroom teachers, as measured by written tests administered prior to and subsequent to participation in an inservice program.

Objective-type factual tests were administered to all VH program staff prior to the start and at the conclusion of the inservice program. Statistical analysis was performed for each of seven areas of knowledge as well as the seven areas combined. T-tests were performed

to identify differences between experimental and control groups on both the pre-test and the post-test and to identify changes within each group from pre-test to post-test.

Summary of results is given below.

1. On the pre-test, there were no significant differences in knowledge between experimental and control groups of resource and itinerant teachers on the total test (all areas combined). However, in one area (Facilitating Acceptance/Modifying the Regular Program), the experimental group scored significantly higher than the control group.

2. On the post-test, the experimental group scored significantly higher than the control group on the total test (all areas combined) and in four of the seven test areas: Legislation, Teacher Role/ Research, Facilitating Acceptance/Modifying the Regular Program, and Resources.

3. Knowledge of the experimental group increased significantly in general (all areas combined) and in six of the seven test areas: Legislation, Teacher Role/Research, Specialized Skills, Assessment, Facilitating Acceptance/Modifying the Regular Program, and Resources.

4. There were no significant changes in knowledge for the control group in general (all areas combined). However, in the area of Facilitating Acceptance, post-tests were significantly higher than pre-tests.

5. The null hypothesis was rejected due to significant differences in knowledge between experimental and control groups.

Inservice Course Evaluations

Evaluations of the inservice course were outstanding. Participants indicated that the course was not long enough and expressed needs for a continuing program of staff development relative to teaching visually handicapped students and providing supportive services to classroom teachers in whose classes visually handicapped students are enrolled.

CONCLUSIONS

The following conclusions were made relative to the findings of this study:

1. The inservice training program for resource and itinerant teachers was effective in increasing the self-confidence of classroom teachers relative to maintaining realistic expectations for their visually handicapped students.

2. The inservice training program for resource and itinerant teachers did not have an impact on classroom teacher evaluations of supportive services provided by resource and itinerant teachers during the time period of the study.

3. The inservice training program was effective in improving self-confidence of participating resource and itinerant teachers.

4. The inservice training program for resource and itinerant teachers was effective in increasing factual knowledge of resource and itinerant teachers relative to providing effective supportive services to classroom teachers.

5. The inservice training program was regarded as beneficial by participating resource and itinerant teachers. Participants requested

additional in-depth staff development pertaining to teaching visually handicapped students and providing supportive services to classroom teachers.

6. The teaching level of classroom teachers affected self-confidence and satisfaction with supportive services: elementary school teachers were more self-confident and better satisfied with supportive services than were junior and senior high school teachers. Teaching level had no effect on self-evaluations of resource teachers.

7. Feelings of classroom teachers toward their visually handicapped student affected self-confidence and satisfaction with supportive services: classroom teachers with positive feelings were more self-confident and better satisfied with supportive services than were classroom teachers with negative or uncertain feelings.

8. The type of supportive service (resource or itinerant) had no effect on classroom teacher self-evaluations, classroom teacher evaluations of supportive services, or resource and itinerant teacher self-evaluations.

9. The amount of experience teaching visually handicapped students had no effect on classroom teacher self-evaluations or classroom teacher evaluations of supportive services. Results were inconclusive concerning the impact of experience on resource and itinerant teacher self-evaluations.

10. The type of school in which itinerant teachers worked (regular or Special Education) had no effect on self-evaluations of itinerant teachers.

RECOMMENDATIONS

Relative to this study of inservice training for resource and itinerant teachers, the following are recommended:

Current Program Practices

1. Resource and itinerant teachers need to provide effective inservice training to classroom teachers working with visually handicapped students relative to: Expectations, Counseling and Guidance, Facilitating Acceptance, and Teaching Methods.

2. Released time needs to be provided for classroom teachers for necessary conferencing, educational planning, participation in the IEP process, and inservice training relative to teaching visually handicapped students.

3. Resource and itinerant teachers need to emphasize instruction of specialized skills needed by visually handicapped students rather than serving in a tutorial role.

4. Written guidelines at both state and district levels for classroom teachers working with visually handicapped students do not currently exist. Appropriate materials need to be prepared and disseminated.

Personnel Training

1. A continuous program of inservice training is needed by resource and itinerant teachers, relative to (1) providing effective supportive services to classroom teachers, (2) updating skills relative to technological and curricular changes in the field of education of visually handicapped students, and (3) serving as a refresher of methods of teaching specialized skills.

2. Teacher training institutions need to incorporate techniques of providing supportive services to classroom teachers in their programs to train teachers of visually handicapped students.

3. Classroom teachers who have visually handicapped students enrolled in their classes need inservice training and ongoing support services relative to understanding what to expect of their visually handicapped students and skills needed to meet the unique needs of their students.

Additional Research Questions

1. What will be the effects of the inservice training program in a year? two years? Skills of classroom teachers and supportive services provided by resource and itinerant teachers were evaluated immediately upon conclusion of the inservice class. A follow-up study needs to be conducted to determine the long-range impact of the inservice training program.

2. Why do elementary school teachers have significantly better self-evaluations and better evaluations of supportive services than do junior and senior high school teachers?

3. Why do teachers with positive feelings toward their visually handicapped student have significantly better self-evaluations than teachers with uncertain or negative feelings?

a. Are there teacher characteristics which result in a tendency to react negatively to a visually handicapped student?

b. Are there teacher characteristics which indicate that placement of a VH student is inadvisable?

c. What are the characteristics of the VH student which result in negative feelings on the part of the teacher?

d. Do VH students who arouse negative feelings on the part of the classroom teacher benefit more (academically, socially/emotionally) from a self-contained class or a mainstreamed setting?

4. Are there significant differences in student achievement, social adjustment, and self-concept among visually handicapped students in resource, itinerant, and/or self-contained programs?

Legislation

1. The concept of "least restrictive environment" needs to be examined. Legislation should encourage flexibility in program placement, contingent upon individual needs at a particular time. Many handicapped students who arouse negative feelings in their teachers and peers are more socially isolated and less appropriately educated in a mainstream setting than in a self-contained class.

2. High priority should be placed on developing and implementing effective staff development programs for classroom teachers and support personnel in mainstream programs.

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SURVEY OF TEACHER NEEDS: WORKING WITH VISUALLY HANDICAPPED STUDENTS

I. For each area, how do you feel concerning the supportive services provided to you by the resource or itinerant teacher of the visually handicapped?

Key to Rating Scale for Supportive Services

OUTSTANDING:	The supportive services are consistently appropriate, effective and constructive.
VERY HELPFUL:	The supportive services are usually practical and include many good suggestions.
ADEQUATE:	The supportive services are basically helpful to me, but I would feel better if more assistance were provided.
MINIMALLY HELPFUL:	The supportive services are occasionally helpful and are of limited assistance to me.
NOT HELPFUL:	The supportive services are generally inappropriate and lacking in constructive suggestions.
NOT APPLICABLE:	The statement does not apply.

II. For each area, how do you feel concerning your ability to effectively help a visually handicapped student in your classroom?

EXTREMELY CONFIDENT:	I have no doubt that I am effectively and consistently meeting the needs of my visually handicapped student.
CONFIDENT:	I feel comfortable about meeting the needs of my visually handicapped student.
ADEQUATE:	I feel that I am basically meeting the needs of my visually handicapped student, but I would feel better if I had more knowledge, skill, or assistance.
MINIMALLY ADEQUATE:	I feel uncertain about meeting the needs of my visually handicapped student.
INADEQUATE:	I am certain that I am not meeting the needs of my visually handicapped student.
NOT APPLICABLE:	The statement does not apply.

Please mark your answers to the following questions according to the rating scales shown above, and return this survey in the enclosed envelope to:

Joy Efron
Prairie Street School
Area 9

Thank you very much for your assistance!

182

INSTRUCTIONS: Supportive Services

Please place an x in one of the boxes to the left of each statement to show how you feel concerning supportive services provided to you by the resource or itinerant teacher of the visually handicapped.

INSTRUCTIONS: Self-Evaluation

Please place an x in one of the boxes to the right of each statement to show how you feel concerning your ability to effectively help a visually handicapped student in your classroom.

SUPPORTIVE SERVICES							SELF-EVALUATION					
OUTSTANDING	VERY HELPFUL	ADEQUATE	MINIMALLY HELPFUL	NOT HELPFUL	NOT APPLICABLE	Expectations	EXTREMELY CONFIDENT	CONFIDENT	ADEQUATE	MINIMALLY ADEQUATE	INADEQUATE	NOT APPLICABLE
☐	☐	☐	☐	☐	☐	1. Knowledge of the similarities and differences between needs of visually handicapped (VH) and regular students	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	2. Confidence in my ability to meet the specialized needs of my VH student	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	3. Understanding how and what the VH student sees in a variety of situations	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	4. Understanding how a visual handicap affects learning	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	5. Knowledge of services provided by the itinerant and/or resource teacher of the visually handicapped to the classroom teacher	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	6. Knowledge of services provided by the itinerant and/or resource teacher of the visually handicapped to the VH student	☐	☐	☐	☐	☐	☐
						Maintaining realistic expectations for the VH student relative to:						
☐	☐	☐	☐	☐	☐	7. Amount and quality of work	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	8. Time requirements to complete assignments and exams	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	9. Grading standards	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	10. Setting standards for acceptable behavior	☐	☐	☐	☐	☐	☐

SUPPORTIVE SERVICES							SELF-EVALUATION						
OUTSTANDING	VERY HELPFUL	ADEQUATE	MINIMALLY HELPFUL	NOT HELPFUL	NOT APPLICABLE		EXTREMELY CONFIDENT	CONFIDENT	ADEQUATE	MINIMALLY ADEQUATE	INADEQUATE	NOT APPLICABLE
1	2	3	4	5	6		1	2	3	4	5	6
						Counseling and Guidance						
☐	☐	☐	☐	☐	☐	11. Understanding and relating to the visually handicapped (VH) student's feelings	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	12. Helping the VH student develop a positive self-concept while accepting visual limitations	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	13. Helping the VH student accept use of needed specialized materials, aids and devices	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	14. Helping the VH student with respect to vocational problems and life goals	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	15. Establishing communication between the classroom teacher and the itinerant and/or resource teacher	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	16. Helping parents cope with their VH child's limitations and potentialities	☐	☐	☐	☐	☐	☐
						Facilitating Acceptance						
☐	☐	☐	☐	☐	☐	17. Fostering a realistic, positive attitude in the class concerning the visually handicapped (VH) student's abilities and limitations	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	18. Involving the VH student in meaningful participation in class and extracurricular activities	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	19. Helping the VH student develop satisfactory peer relationships	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	20. Fostering acceptable patterns of behavior	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	21. Including the VH student in special activities, i.e. recess, playground, cafeteria, home economics, industrial arts, P.E., field trips	☐	☐	☐	☐	☐	☐

Teaching Methods and Strategies to Implement the Educational Program

1	2	3	4	5	6		1	2	3	4	5	6
☐	☐	☐	☐	☐	☐	22. Assessing the visually handicapped (VH) student's strengths and weaknesses	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	23. Developing objectives based upon assessment	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	24. Encouraging the visually handicapped student to effectively use residual vision and low vision aids	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	25. Encouraging tactile exploration and direct "hands-on" learning experience	☐	☐	☐	☐	☐	☐
						Structuring content, activities, and materials to meet needs of both regular and visually handicapped students, including:						
☐	☐	☐	☐	☐	☐	26. Modifying assignments: how, when, to what extent	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	27. Presenting instructions and material clearly and concisely	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	28. Giving special assistance in an unobtrusive manner	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	29. Developing a sense of responsibility and effective study skills	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	30. Utilizing materials, aids, and devices needed by the VH student	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	31. Orienting the VH student to the physical surroundings	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	32. Providing proper lighting, ventilation, seating arrangement	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	33. Providing storage space for specialized materials	☐	☐	☐	☐	☐	☐
						Providing for participation of the visually handicapped student in classroom activities which normally require vision, including:						
☐	☐	☐	☐	☐	☐	34. Bulletin and chalkboard work	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	35. Filmstrips, movies, slides	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	36. Reproduced materials (dittoes, maps, graphs, etc.)	☐	☐	☐	☐	☐	☐

(over)

19

Background Information Please circle the letter of the one best response for items 37-40.

37. What level are you presently teaching?

a. Special Education (regardless of level)
b. Elementary
c. Junior High
d. Senior High

38. *If you circled a. or b. above, skip this item and proceed to item 39.*
If you circled c. or d. above, for what subject is the visually handicapped student enrolled in your class?

a. Art
b. Business Education
c. Driver Education
d. English
e. Environmental and Agricultural Education
f. Foreign Language
g. Health Education
h. Health Occupation Education
i. Home Economics Education
j. Industrial Education
k. Interdisciplinary
l. Mathematics
m. Music
n. Physical Education
o. Public Service Education
p. Reading
q. Science
r. Social Studies
s. Special Programs
t. Work Experience Education

39. Is this your first experience teaching a visually handicapped student?

a. Yes
b. No

40. Is the visually handicapped student in your class a positive experience for you and your other students?

a. Yes
b. No
c. Uncertain

APPENDIX B. Transmittal Letter to Classroom Teachers for the Pre-Test Survey

LOS ANGELES UNIFIED SCHOOL DISTRICT
Division of Special Education

January 7, 1980

TO: Selected Teachers

FROM: Alfonso B. Perez, Assistant Superintendent
Division of Special Education

SUBJECT: SURVEY OF TEACHER NEEDS REGARDING VISUALLY HANDICAPPED STUDENTS

I. Background
II. Survey of Teacher Needs
III. Compilation of Survey Results

I. BACKGROUND

In March 1978, Dr. Joy Efron presented to the Board of Education a research proposal entitled "Inservice Training for Itinerant and Resource Teachers of Visually Handicapped Students." This proposal, subsequently approved and funded by the State Department of Education, will provide training for itinerant and resource teachers of the visually handicapped so that they can offer needed services and guidance to regular classroom teachers and visually handicapped students who are integrated in regular classes.

II. SURVEY OF TEACHER NEEDS

In order to determine how to provide the best possible supportive services to classroom teachers working with visually handicapped students, a Survey of Teacher Needs is being conducted. Survey results will be used to develop course content for inservice training as well as appropriate guides and materials for itinerant and resource teachers. Participants have been selected on a random basis, and completion of this survey should require approximately ten minutes. Responses are to be returned by February 7, 1980.

III. COMPILATION OF SURVEY RESULTS

The Survey of Teacher Needs (Attachment #1) will be handled anonymously. Pre and post surveys are coded for matching statistical data. There will be no identification of individual teachers. Responses will be grouped according to teaching level and subject area. If you would like a copy of the survey results, please complete the Request for Results form (Attachment #2) and send it to Dr. Joy Efron, Prairie Street School, Area 9, as a separate mailing.

This request for information has been approved by the Office of the Deputy Superintendent.

For assistance, please call Dr. Joy Efron, Project Director, Special Education Research Program, P.L. 94-142, at 886-1582.

APPROVED: JOSEPH P. LINSCOMB, Associate Superintendent, Instruction

APPENDIX C. Transmittal Letter to Principals for the Pre-Test Survey

LOS ANGELES UNIFIED SCHOOL DISTRICT
Division of Special Education

January 7, 1980

TO: Selected Principals

FROM: Alfonso B. Perez, Assistant Superintendent
Division of Special Education

SUBJECT: SURVEY OF TEACHER NEEDS REGARDING VISUALLY HANDICAPPED STUDENTS, SPECIAL EDUCATION RESEARCH PROGRAM, P.L. 94-142

I. Background
II. Survey of Teacher Needs

I. BACKGROUND

In March 1978, Dr. Joy Efron presented a research proposal to the Board of Education which was subsequently approved and funded by the State Department of Education. The proposal is entitled "Inservice Training for Itinerant and Resource Teachers of Visually Handicapped Students."

This program will provide training for itinerant and resource teachers of the visually handicapped to prepare them to offer needed services and guidance to both regular classroom teachers and visually handicapped students who are integrated in regular classes. Following a survey of needs, course content for inservice training will be developed as well as appropriate guides and materials for itinerant and resource teachers.

II. SURVEY OF TEACHER NEEDS

Information regarding this project (Attachment #1) and a list of randomly selected teachers for participation at your school (Attachment #2) are enclosed.

Participation in this project is voluntary. The identification of respondents will be kept confidential. Survey materials will be mailed directly to the selected teachers.

This request for information has been approved by the Office of the Deputy Superintendent.

For assistance, please call James Esterle, Coordinator, Visually Handicapped Program, at 625-6739.

APPROVED: JOSEPH P. LINSCOMB, Associate Superintendent, Instruction

APPENDIX D. Transmittal Letter to Classroom Teachers for the Post-Test Survey

LOS ANGELES UNIFIED SCHOOL DISTRICT
Division of Special Education

May 9, 1980

TO: Teachers of Regular Classes Containing Visually Handicapped Students

FROM: Alfonso B. Perez, Assistant Superintendent

SUBJECT: POST-SURVEY OF TEACHER NEEDS REGARDING VISUALLY HANDICAPPED STUDENTS

I. Background
II. Post-Survey of Teacher Needs
III. Compilation of Survey Results

I. BACKGROUND

In March 1978, Dr. Joy Efron presented a research proposal to the Board of Education which was subsequently approved and funded by the State Department of Education. The proposal is entitled "Inservice Training for Itinerant and Resource Teachers of Visually Handicapped Students." The purposes of this project are to identify needs of regular classroom teachers who have visually handicapped students integrated in their classes and improve supportive services to regular teachers provided by itinerant and resource teachers of the visually handicapped.

II. POST-SURVEY OF TEACHER NEEDS

Based on responses from randomly selected teachers of the "Survey of Teacher Needs" (January 1980), an inservice class was developed and conducted for itinerant and resource teachers of the visually handicapped. A follow-up survey is now being sent to those teachers who have visually handicapped students enrolled in their regular classes. The survey will evaluate the effectiveness of the inservice training and give valuable input to the Division of Special Education for future staff development efforts.

Completion of this survey should require approximately 10-15 minutes. Responses are to be returned by May 23, 1980.

III. COMPILATION OF SURVEY RESULTS

The Survey of Teacher Needs (Attachment #1) will be handled anonymously. Pre and post surveys are coded for matching statistical data. There will be no identification of individual teachers. Responses will be grouped according to teaching level and subject area. If you would like a copy of the survey results, please complete the Request for Results form (Attachment #2) and send it to Dr. Joy Efron, Prairie Street School, Area 9, as a separate mailing.

This request for information has been approved by the Office of the Deputy Superintendent.

For assistance, please call Dr. Joy Efron, Project Director, Special Education Research Program, P.L. 94-142, at 886-1582.

APPROVED: JOSEPH P. LINSCOMB, Associate Superintendent, Instruction

APPENDIX E. Transmittal Letter to Principals for the Post-Test Survey

LOS ANGELES UNIFIED SCHOOL DISTRICT
Division of Special Education

May 9, 1980

TO: Selected Principals

FROM: Alfonso B. Perez, Assistant Superintendent

SUBJECT: POST-SURVEY OF TEACHER NEEDS REGARDING VISUALLY HANDICAPPED STUDENTS, SPECIAL EDUCATION RESEARCH PROGRAM, P.L. 94-142

I. Background
II. Post-Survey of Teacher Needs

I. BACKGROUND

The Division of Special Education is presently completing a district approved Special Education Research Program, funded by the State Department of Education under P.L. 94-142. The project "Inservice Training for Itinerant and Resource Teachers of Visually Handicapped Students," is directed by Dr. Joy Efron.

The purposes of this project are to (1) identify needs of regular classroom teachers who have visually handicapped students enrolled in their classes, (2) provide inservice training and prepare guides and materials for itinerant and resource teachers of the visually handicapped to improve supportive services to regular teachers, and (3) evaluate the effectiveness of the inservice training.

II. POST-SURVEY OF TEACHER NEEDS

A "Survey of Teacher Needs" was sent to randomly selected teachers in January, 1980. Survey data was used to develop the inservice class for resource and itinerant teachers. The follow-up survey is now being sent to all district teachers who have visually handicapped students enrolled in their classes.

Enclosed are a survey (Attachment #1) and a list of teachers in your school who have a visually handicapped student (Attachment #2).

Participation in this project is voluntary. The identification of respondents will be kept confidential. Survey materials will be mailed directly to the selected teachers.

This request for information has been approved by the Office of the Deputy Superintendent.

For assistance, please call James Esterle, Coordinator, Visually Handicapped Program, at 625-6739.

APPROVED: JOSEPH P. LINSCOMB, Associate Superintendent, Instruction

APPENDIX F. Request for Results Form

Division of Special Education

May 9, 1980
ATTACHMENT #2

REQUEST FOR RESULTS

POST-SURVEY OF TEACHER NEEDS:
WORKING WTIH VISUALLY HANDICAPPED STUDENTS

If you would like to receive a summary of post-survey results, please return this form separately from your completed survey in order to assure anonymity of survey responses.

Dr. Joy Efron
Project Director
Special Education Research Program, P.L. 94-142
Prairie Street School
Area 9

Dear Dr. Efron:

Please send me a copy of the results of the POST-SURVEY OF TEACHER NEEDS: WORKING WITH VISUALLY HANDICAPPED STUDENTS.

Sincerely,

Name _____

School _____

Area _____

APPENDIX F

REQUEST FOR RESULTS

SURVEY OF RESOURCE AND ITINERANT TEACHERS:
PROVIDING SUPPORTIVE SERVICES TO CLASSROOM TEACHERS

If you would like to receive a summary of survey results, please return this form separately from your completed survey in order to assure anonymity of survey responses.

Joy Efron
Project Director
Special Education Research Program, PL 94-142
Prairie Street School
Area 9

Dear Joy,

Please send me a copy of the results of the SURVEY OF RESOURCE AND ITINERANT TEACHERS: PROVIDING SUPPORTIVE SERVICES TO CLASSROOM TEACHERS.

Sincerely,

Name_____

School_____

Area _____

SURVEY OF RESOURCE AND ITINERANT TEACHERS: PROVIDING SUPPORTIVE SERVICES TO CLASSROOM TEACHERS

I. For each area, how do you feel concerning the effectiveness of classroom teachers in meeting the needs of a visually handicapped student in the classroom?

II. For each area, how do you feel concerning your effectiveness in providing supportive services to classroom teachers?

Please mark your answers to the questions on pages 2 and 3 according to the rating scales below, and return this survey in the enclosed manila envelope to:

Joy Efron
Prairie Street School
Area 9

Thank you very much for your assistance!

I. Key to Rating Scale for Classroom Teachers

EXTREMELY CONFIDENT:	I have no doubt that classroom teachers are effectively and consistently meeting the needs of my visually handicapped students.
CONFIDENT:	I feel comfortable about the effectiveness of classroom teachers in meeting the needs of my visually handicapped students.
ADEQUATE:	I feel that classroom teachers are basically meeting the needs of my visually handicapped students, but they would be more effective if they had more knowledge or skill.
MINIMALLY ADEQUATE:	I feel uncertain about the effectiveness of classroom teachers in meeting the needs of my visually handicapped students.
INADEQUATE:	I am certain that classroom teachers are not meeting the needs of my visually handicapped students.
NOT APPLICABLE:	The statement does not apply.

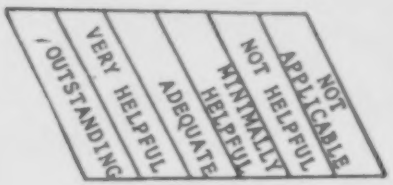
II. Key to Rating Scale for Resource and Itinerant Teacher Self-Evaluation

OUTSTANDING:	I feel that the supportive services I provide are consistently appropriate, effective and constructive.
VERY HELPFUL:	I feel that the supportive services I provide are usually practical and include many good suggestions.
ADEQUATE:	I feel that the supportive services I provide are basically helpful to the classroom teacher, but I would feel better if I could provide more assistance.
MINIMALLY HELPFUL:	I feel that the supportive services I provide are occasionally helpful and are of limited assistance to the classroom teacher.
NOT HELPFUL:	I feel that the supportive services I provide are generally inappropriate and lacking in constructive suggestions.
NOT APPLICABLE:	The statement does not apply.

SELF-EVALUATION

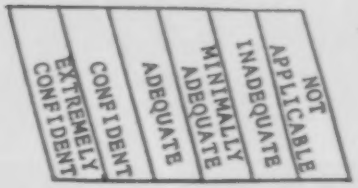
INSTRUCTIONS

CLASSROOM TEACHERS



I. *Please place an x in one of the boxes to the right of each statement to show how you feel concerning the effectiveness of classroom teachers in meeting the needs of a visually handicapped student in the classroom.*

II. *Please place an x in one of the boxes to the left of each statement to show how you feel concerning your effectiveness in providing supportive services to classroom teachers.*



1 2 3 4 5 6		1 2 3 4 5 6
	Expectations	
☐ ☐ ☐ ☐ ☐ ☐	1. Knowledge of the similarities and differences between needs of visually handicapped (VH) and regular students	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	2. Self-confidence of the classroom teacher in ability to meet the specialized needs of the VH student	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	3. Understanding how and what the VH student sees in a variety of situations	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	4. Understanding how a visual handicap affects learning	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	5. Knowledge by the classroom teacher of services provided by the itinerant and/or resource teacher of the visually handicapped to the classroom teacher	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	6. Knowledge by the classroom teacher of services provided by the itinerant and/or resource teacher of the visually handicapped to the VH student	☐ ☐ ☐ ☐ ☐ ☐
	Maintaining realistic expectations for the VH student relative to:	
☐ ☐ ☐ ☐ ☐ ☐	7. Amount and quality of work	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	8. Time requirements to complete assignments and exams	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	9. Grading standards	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	10. Setting standards for acceptable behavior	☐ ☐ ☐ ☐ ☐ ☐
	Counseling and Guidance	
☐ ☐ ☐ ☐ ☐ ☐	11. Understanding and relating to the visually handicapped (VH) student's feelings	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	12. Helping the VH student develop a positive self-concept while accepting visual limitations	☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐	13. Helping the VH student accept use of needed specialized materials, aids and devices	☐ ☐ ☐ ☐ ☐ ☐

SELF-EVALUATION		CLASSROOM TEACHERS
1 2 3 4 5 6		1 2 3 4 5 6
☐☐☐☐☐☐	14. Helping the VH student with respect to vocational problems and life goals	☐☐☐☐☐☐
☐☐☐☐☐☐	15. Establishing communication between the classroom teacher and the itinerant and/or resource teacher	☐☐☐☐☐☐
☐☐☐☐☐☐	16. Helping parents cope with their VH child's limitations and potentialities	☐☐☐☐☐☐
	Facilitating Acceptance	
☐☐☐☐☐☐	17. Fostering a realistic, positive attitude in the class concerning the visually handicapped (VH) student's abilities and limitations	☐☐☐☐☐☐
☐☐☐☐☐☐	18. Involving the VH student in meaningful participation in class and extracurricular activites	☐☐☐☐☐☐
☐☐☐☐☐☐	19. Helping the VH student develop satisfactory peer relationships	☐☐☐☐☐☐
☐☐☐☐☐☐	20. Fostering acceptable patterns of behavior	☐☐☐☐☐☐
☐☐☐☐☐☐	21. Including the VH student in special activities, i.e. recess, playground, cafeteria, home economics, industrial arts, P.E., field trips	☐☐☐☐☐☐
	Teaching Methods and Strategies to Implement the Educational Program	
☐☐☐☐☐☐	22. Assessing the visually handicapped (VH) student's strengths and weaknesses	☐☐☐☐☐☐
☐☐☐☐☐☐	23. Developing objectives based upon assessment	☐☐☐☐☐☐
☐☐☐☐☐☐	24. Encouraging the visually handicapped student to effectively use residual vision and low vision aids	☐☐☐☐☐☐
☐☐☐☐☐☐	25. Encouraging tactile exploration and direct "hands-on" learning experience	☐☐☐☐☐☐
	Structuring content, activities and materials to meet needs of both regular and visually handicapped students, including:	
☐☐☐☐☐☐	26. Modifying assignments: how, when, to what extent	☐☐☐☐☐☐
☐☐☐☐☐☐	27. Presenting instructions and material clearly and concisely	☐☐☐☐☐☐
☐☐☐☐☐☐	28. Giving special assistance in an unobtrusive manner	☐☐☐☐☐☐
☐☐☐☐☐☐	29. Developing a sense of responsibility and effective study skills	☐☐☐☐☐☐
☐☐☐☐☐☐	30. Utilizing materials, aids and devices needed by the VH student	☐☐☐☐☐☐

SELF-EVALUATION

OUTSTANDING	VERY HELPFUL	ADEQUATE	MINIMALLY HELPFUL	NOT HELPFUL	NOT APPLICABLE
1	2	3	4	5	6

CLASSROOM TEACHERS

EXTREMELY CONFIDENT	CONFIDENT	ADEQUATE	MINIMALLY ADEQUATE	INADEQUATE	NOT APPLICABLE
1	2	3	4	5	6

Structuring the physical environment to meet the needs of the visually handicapped student, including:

31. Orienting the VH student to the physical surroundings
32. Providing proper lighting, ventilation, seating arrangement
33. Providing storage space for specialized materials

Providing for participation of the visually handicapped student in classroom activities which normally require vision, including:

34. Bulletin and chalkboard work
35. Filmstrips, movies, slides
36. Reproduced materials (dittoes, maps, graphs, etc.)

Background Information Please circle the letter of the one best response for items 37-40.

37. In what type of program for the visually handicapped are you presently teaching?

    a. Resource
    b. Itinerant

38. *If you circled a. for item 37,* what level are you presently teaching?

    a. Special Education (regardless of level)
    b. Elementary
    c. Junior High
    d. Senior High

39. *If you circled b. for item 37,* in what type of schools are you presently teaching?

    a. Regular schools
    b. Special education schools

40. Including this year, how many years have you taught visually handicapped students?

    a. 1-3
    b. 4-8
    c. 9-14
    d. 15 or more

Los Angeles Unified School District

VISUALLY HANDICAPPED OFFICE
5210 CLINTON STREET, LOS ANGELES, CALIFORNIA 90004
TELEPHONE: (213) 625-6739

WILLIAM J. JOHNSTON
Superintendent of Schools

ALFONSO B. PEREZ
Assistant Superintendent
Division of Special Education

JIM ESTERLE
Coordinating Principal

FREDERICK G. SHAFFNEI
Assistant Principal

APPENDIX H. Transmittal Letter to Resource and Itinerant Teachers for the Pre-Test Survey.

Special Education Research Program, PL 94-142
Prairie Street School
17930 Prairie Street
Northridge, California 91325

JOY R. EFRON
Project Director

November 28, 1979

Dear

Our Special Education Research Program, PL 94-142, "Inservice Training for Teachers of Visually Handicapped Students," is currently being implemented.

Purpose and Components: The purpose of this study is to determine how to provide the best possible supportive services to classroom teachers working with visually handicapped students. A survey of needs of (1) classroom teachers and (2) resource and itinerant teachers is being conducted. Results of the survey will be used to develop course content for inservice training as well as appropriate guides and materials for itinerant and resource teachers. Effectiveness of the program will be evaluated in Spring, 1980.

Surveys: The survey of teacher needs is being sent to a group of randomly selected teachers who have visually handicapped students enrolled in their classes. In addition, resource and itinerant teachers are being requested to complete the attached "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers."

Completion of the survey should require approximately ten minutes of your time. On the left hand column, please place an X in one of the boxes corresponding to your self-evaluation of supportive services you provide. In the right hand column, please place an X in one of the boxes corresponding to your assessment of the level of skills of classroom teachers in general in meeting the needs of your visually handicapped students.

Survey Results: Surveys are anonymous. Pre and post surveys are coded for matching statistical data. There will be no identification of individuals at any time. If you would like a copy of the survey results, please complete the Request for Results form and return to me at Prairie Street School, Area 9, as a separate mailing.

Your cooperation in completing pre and post project surveys is greatly appreciated and will be valuable in developing the inservice course and materials as well as in evaluating the effectiveness of the project.

Please return your completed survey by December 12. Any questions or requests for information should be directed to me at Prairie Street School, Area 9, 886-1819 or 886-1582. Thank you for your assistance.

Sincerely,

Joy R. Efron

Joy R. Efron, Ed.D.
Project Director

JRE:sh
Encl.

APPENDIX I. Transmittal Letter to Resource and Itinerant Teachers for the Post-Test Survey.

Los Angeles Unified School District

VISUALLY HANDICAPPED OFFICE
5210 CLINTON STREET, LOS ANGELES, CALIFORNIA 90004
TELEPHONE: (213) 625-6739

WILLIAM J. JOHNSTON
Superintendent of Schools

ALFONSO B. PEREZ
Assistant Superintendent
Division of Special Education

JIM ESTERLE
Coordinating Principal

FREDERICK G. SHAFFNEI
Assistant Principal

Special Education Research Program, PL 94-142
Prairie Street School
17930 Prairie Street
Northridge, California 91325

JOY R. EFRON
Project Director

May 12, 1980

Dear

I want to thank you for the help you have given me this year in the Special Education Research Project, "Inservice Training for Teachers of Visually Handicapped Students." I know it has taken everyone's time to fill out surveys, take objective tests, send me lists of your teachers, and, for some people, to participate in the inservice class.

I now have computer printouts and statistical analyses of the first surveys (regular teachers and visually handicapped staff). I am preparing a report on the survey results and will send you a copy shortly.

In order to evaluate the effectiveness of the inservice class and to identify future staff development needs, the second (post-test) survey is being sent now to all regular teachers in the district who have a visually handicapped student in their classes. The first survey was sent to half of the teachers, selected at random. I am enclosing the second (post-test) survey for our staff, "Survey of Resource and Itinerant Teachers: Providing Supportive Services to Classroom Teachers." I will greatly appreciate your completing the Self-Evaluation (left side only) as well as items 37-40 and returning the survey to me by May 23.

Do not respond to the right-hand side, "Classroom Teachers." The statistician has advised me to eliminate this section because it is difficult to generalize about all the teachers with whom you work, and because it would take an inordinate amount of your time to evaluate each classroom teacher separately.

Completion of the survey should require approximately ten minutes of your time. On the left hand column, please place an X in one of the boxes corresponding to your self-evaluation of supportive services you provide.

Surveys are anonymous. Pre and post surveys are coded for matching statistical data. There will be no identification of individuals at any time.

Please return your completed survey by May 23. Any questions or requests for information should be directed to me at Prairie Street School, Area 9, 886-1819 or 886-1582. Thank you for your assistance.

Sincerely,

Joy R. Efron

Joy R. Efron, Ed.D.
Project Director

JRE:sh
Encl.

APPENDIX J. Objective Test of Knowledge for Resource and Itinerant Teachers.

SERP, PL 94-142
Joy R. Efron

Legislation, Characteristics, Trends and Services

Multiple Choice: Circle all correct answers.

1. Which of the following is/are not required under PL 94-142?

   a. Each state must actively search for handicapped individuals.
   b. Handicapped students must be placed in neighborhood schools.
   c. Every student must have an IEP.
   d. Parents must be actively encouraged to be involved in decision making concerning their handicapped children.
   e. Classroom teachers must participate in placement decisions.

2. Title V of the Rehabilitation Act of 1973 (PL 93-112) is similiar in many respects to the:

   a. 1964 Civil Rights Act
   b. Lanterman Mental Retardation Services Act
   c. AB 1250
   d. CAC, Title V

3. In addition to other Special Education funding, Education Code Section 18102.9 provides for additional money for legally blind students for the following service(s):

   a. Mobility instruction
   b. Reader services
   c. Secretarial services
   d. Specialized books, supplies and equipment
   e. Supplemental instruction in vocational education

4. The educational definition of blindness is:

   a. visual acuity of 20/200 or less.
   b. the same as the legal definition, which defines eligibility for state and federal services.
   c. inability to read print.
   d. visual acuity no greater than 20/70 in the better eye after correction.
   e. inability to distinguish light.

5. List four current trends in the education of visually handicapped students.

   a. ----------

   b. ----------

   c. ----------

   d. ----------

True or False

6. _____ Under current California law, the State may not adopt textbooks and supplementary texts unless permission is received to transcribe them into any media required by students with exceptional needs.

7. _____ The regional library of NLS, Library of Congress, is located at Braille Institute of America, Inc.

8. _____ Percentage-wise, blindness is one of the larger disabilities afflicting Americans.

9. _____ "Least restrictive environment" has been defined by the Federal government (and by the State of California) as that environment which provides each child with the most contact with non-handicapped children.

Matching: Next to each numbered item, write the correct letter from the choices at the right.

10. PL 94-142	_____	a.	State law
11. CAC, Title V	_____	b.	Federal law
12. Ed Code 18102.9	_____	c.	State Department of Education regulations
13. AB 1250	_____		

Skills Needed by Regular Classroom Teachers

14. Self-evaluation of classroom teachers working with visually handicapped students is lowest in which one of the following areas?

   a. Expectations
   b. Counseling and guidance
   c. Facilitating acceptance
   d. Teaching methods and strategies

15. In which one of the following areas do classroom teachers feel that supportive services most need strengthening?

    a. Expectations
    b. Counseling and guidance
    c. Facilitating acceptance
    d. Teaching methods and strategies

Role of Resource and Itinerant Teachers

True or False

16. _____ The literature abounds with role descriptions of resource and itinerant teachers, but says little about the role of the classroom teacher of visually handicapped students.

According to the AFB nationwide study:

17. _____ Itinerant teachers travel approximately 1,000 miles per month.

18. _____ Caseload of resource and itinerant teachers average 1/3 to 1/2 multi-handicapped students.

19. _____ Approximately 50% of the resource and itinerant teachers' working day is spent in activities other than instructing students.

20. _____ Generally speaking, teachers of visually handicapped students in different types of programs have very different reactions to the importance and amount of time spent in various components of their roles.

21. _____ Teachers of visually handicapped students feel that their roles in assessment/evaluation and in guidance/counseling are more important than in educational/instructional strategies.

Research

Multiple Choice

22. Research has shown the most effective service delivery model for visually handicapped children to be:

    a. regular class placement
    b. regular class placement with consultant teacher
    c. resource room program
    d. full-time special class
    e. not clearly distinguished by research

True or False

23. _____ Research has shown that placement in the mainstream assists in the development of positive socialization skills.

24. _____ There is solid evidence that the curriculum offered to visually handicapped students in a regular classroom is more desirable than the curriculum offered in a residential school.

In the Los Angeles study:

25. _____ Self-evaluation of resource and itinerant teachers in all areas are very similar.

26. _____ Teachers of the visually handicapped who have 9-14 years teaching experience have a higher self-evaluation and a higher evaluation of classroom teachers than any other group of visually handicapped teachers.

27. _____ Teachers of the visually handicapped rate themselves significantly higher than they rate classroom teachers.

Educational Implications of Visual Limitations

True or False

28. _____ Visual acuity refers to the sharpness or clearness of central vision.

29. _____ Certain refractive errors of the eye, such as presbyopia, improve naturally with age.

30. _____ A student with visual acuity of 20/70 OU can probably read material on the chalkboard if seated in the front row.

31. _____ A child who passes the visual acuity test during screening can be assumed to have no visual problem.

32. _____ Just because a patient can see 4-point single digit print does not mean he has good reading vision.

33. _____ The educational definition of blindness is concerned with a person's ability to utilize vision in acquiring data.

34. _____ The Snellen chart assesses the type of vision most closely associated with reading.

35. _____ All partially seeing individuals require high levels of illumination.

36. _____ Prenatal influences are currently the major cause of blindness in children, followed by injuries.

37. _____ Low vision aids, such as the CCTV, eliminate the need for braille for most visually handicapped students who would otherwise be braille readers.

38. _____ Assessment at a low vision clinic is usually conducted in a well-lit, instead of a darkened, room.

Matching: Write the letter of <u>each</u> correct response from the list at the right after each item on the left.

39. See better in dim light. _____

40. See better with high illumination. _____

a. Albinism
b. Retinitis pigmentosa
c. Central cataract before surgery
d. Macular pathology
e. Optic atrophy
f. None of the above

Matching: Next to each numbered item, write the correct letter from the choices at the right.

41. _____ Refractive error resulting from irregular curvature of the cornea

42. _____ Lens becomes opaque

43. _____ Crossed-eyes

44. _____ Eye damage from high concentrations of oxygen

45. _____ Increased pressure within the eye

46. _____ Damage in pathway from eye to brain

47. _____ Rapid, involuntary eye movements

48. _____ Loss of vision caused by brain repressing image

49. _____ Trouble with night vision and restricted visual fields

a. Strabismus
b. Optic atrophy
c. Retrolental fibroplasia
d. Retinitis pigmentosa
e. Astigmatism
f. Cataract
g. Nystagmus
h. Glaucoma
i. Amblyopia

<u>Resources</u>

True or False

50. _____ In order to legally transcribe a book into braille, large print or recorded form, permission must be obtained from the author and/or publisher unless APH already has blanket permission from the publisher.

51. _____ Microfilm enlargement and other commercially prepared large print books are extremely costly in comparison with conventional print materials.

52. _____ Students in public and private schools and colleges in California who are unable to read conventional print can be provided with recorded materials through CDHS.

53. _____ California's major state adopted textbooks are brailled and printed in large type by the State for grades 1-12.

54. _____ The amount of Federal quota money received is determined by the number of blind and partially seeing students enrolled in public schools in each state.

Multiple Choice: In the space following each situation on the left, write the letter of <u>each</u> group to be contacted, from the choices at the right.

55. A blind tenth grader needs to do a report on the Civil War
_____

56. A mentally retarded tenth grader who can't read needs to do a report on the Civil War
_____

57. A partially seeing fifth grader needs a large print math textbook
_____

58. A blind mathematician needs trigonometric tables
_____

59. A blind junior high student needs a Talking Calculator, abacus, and braille thermometer
_____

a. APH--American Printing House for the Blind

b. CDHS--Clearinghouse Depository for Handicapped Students

c. National Library Service/Library of Congress

d. Office of Textbook Distribution

e. Recordings for the Blind

f. Central Catalog

g. National Braille Association

<u>Specialized Skills Needed by Visually Handicapped Students</u>

60. Totally blind children are currently taught to handwrite:

a. as are sighted children
b. as are partially seeing children
c. with wire guides
d. only personal correspondence
e. little more than their signatures

61. All the following statements are true. Which <u>one</u> would have the highest priority?

Signature writing for the blind:

a. provides a highly complex experience in fine-motor coordination.
b. provides a means of legal independence.
c. provides method of communication accepted by the normally sighted society.
d. provides competency in an area felt to be vital by the Division of Vocational Rehabilitation.

62. Name five specialized areas of the curriculum which are needed by visually handicapped students and which are the responsibility of the special teacher.

a. _____

b. _____

c. _____

d. _____

e. _____

<u>Assessment</u>

Matching: In the space following each area of assessment on the left, write the letter of the appropriate instrument, from the choices at the right.

63. Basic concepts ____
64. Intelligence test ____
65. Oral reading ____
66. Body image ____
67. Visual functioning ____
68. Social maturity ____
69. Developmental skills inventory ____
70. Auditory and visual perception ____

a. Barraga
b. Boehm Test
c. Illinois Test of Psycho-linguistic Abilities
d. Gilmore and/or Gray
e. Oregon Project
f. Maxfield-Buchholz
g. Hayes-Binet
h. Cratty

Facilitating Acceptance and Modifying the Regular Program

71. List three materials and/or approaches to help facilitate acceptance of a visually handicapped student by his/her classmates.

    a. _____

    b. _____

    c. _____

72. How would you modify the game of baseball so a blind student could participate?

    _____

73. MAVIS and SAVI are examples of:

    a. Counseling techniques
    b. Curriculum adaptations
    c. Assessment instruments
    d. Clearinghouses for specialized materials

74. Which of the following children is most likely to have a low self-image?

    a. the normally sighted child
    b. the partially sighted child
    c. the legally blind child
    d. the totally blind child

75. Educational principles for teaching the visually disabled include all the following except:

    a. individualization
    b. concreteness
    c. conservation of remaining vision through limiting use
    d. use of sensory-motor-kinesthetic materials
    e. integration of areas of instruction

APPENDIX K. Inservice Course Evaluation Form

LOS ANGELES UNIFIED SCHOOL DISTRICT
DIVISION OF SPECIAL EDUCATION

STAFF DEVELOPMENT POINT PROJECT

Course Title: Providing Effective Supportive Services to Classroom Teachers Who Work with Mainstreamed Visually Handicapped Students

Course Number: SE 55-11-169.10

Instructor: Dr. Joy Efron

Please indicate your evaluation of the course by circling the appropriate numbers (8 = excellent)

1. Planning and organization of the course 1 2 3 4 5 6 7 8
2. Leadership of the course 1 2 3 4 5 6 7 8
3. Overall content of the course 1 2 3 4 5 6 7 8
4. Extent to which course objectives were met . 1 2 3 4 5 6 7 8
5. Value of audio-visual materials 1 2 3 4 5 6 7 8
6. Value of handout materials 1 2 3 4 5 6 7 8
7. Personal gain in knowledge and understanding 1 2 3 4 5 6 7 8
8. Practical applications for use in your own classroom 1 2 3 4 5 6 7 8
9. Suggestions for improving the course:

_____

_____

_____

10. Other comments:

_____

_____

_____

11. Did you feel the overall inservice was long enough to adequately cover the topics presented?

_____

_____

12. What do you think the strengths of the workshop were? Please specify.

_____

_____

_____

13. What do you think the weaknesses of the workshop were? Please specify.

_____

_____

_____

14. Which topic(s) would you like more of?

_____

_____

_____

15. Which, if any, topic(s) did you feel did not relate to your needs?

_____

_____

_____

16. Can you suggest any additional topics for future inservice?

_____

_____

_____

APPENDIX L. Responses to Inservice Course Evaluation Form

The following quotes are responses to specific questions on the short-answer portion of the inservice evaluation form.

Suggestions for improving the course

1. "More time is needed to cover the course work that was covered."
2. "Need more time in each area, perhaps specialize in one topic and spend time going over and examining it thoroughly."
3. "Spend more time on all topics covered."
4. "Needed more time."
5. "None - just extending it. There was so much information - too much to digest in one class. Would like an entire session on SAVI, on teaching specialized skills."
6. "The course was great; however, I felt we needed more time. Perhaps next time it could be broken into 2 or 3 courses allowing more time for in depth study of the different areas covered."
7. "More speakers."
8. "More time allowed for discussion. Assignments re: use of hand-outs, things to try with teachers and report back, etc."
9. "I don't see how it could be improved. It only could be broadened by introducing new topics."
10. "I would like to spend more time with SAVI and MAVIS materials. Would also like a session on low vision aids."
11. "I really don't have any suggestions in this area. It was an excellent course and met my needs and expectations many times over."

12. "Going into more depth on each area of curriculum. Don't think the final exam was too relevant."
13. "Course covered so many things - possibly having more time to work on some of the areas."
14. "Needed more class time - this class had so much information that it needed to be expanded into a longer class."
15. "No Saturday sessions please."
16. No response (4 people)

Did you feel the overall inservice was long enough to adequately cover the topics presented?

1. "No." (5 people)
2. "No, there was so much information to cover, that I feel more time was needed. There is so much information we know nothing about."
3. "No, we needed more time for certain topics (science, assessment)."
4. "No - there is too much I'd like to learn and review."
5. "No - more time needed."
6. "No - but need another class."
7. "Not really - but it would have to be in separate units so there would be time in between for digestion."
8. "The course could continue indefinitely with still many areas opened for explanation and study."
9. "I feel that it could be even longer so that we go more into depth in some areas."
10. "I would like to have seen it a 3 salary point course and had more sessions."

11. "Yes" (2 people)
12. "Yes - but personally I feel I could use additional inservice."
13. "My personal schedule necessitated my missing Saturday sessions so I missed out some valuable information."
14. No response (1 person)

What do you think the strengths of the workshop were? Please specify.

1. "Organization; planning; information was given which was applicable to my classroom situation at present time. Exposure to materials."
2. "The teacher was experienced and knew what areas help was needed."
3. "Concrete materials presented (films, SAVI and MAVIS were excellent, wanted more)."
4. "Speakers, although controversial, were informative. Handouts are excellent - need to review them together. Rosemary's tests and review of tests were helpful."
5. "Organization and knowledge of instructor. Attitude and cooperation of participants. Common concern of all for professional growth of self and visually handicapped office as a whole."
6. "The opportunity to share experiences. The 'hands-on' activities - exposure to some programs that were new to me. Communication activities."
7. "Knowledge of the instructor; mode of presentation and relevancy of information."
8. "Materials - films - speakers."
9. "The richness of materials and topics presented from legal aspects to educational and medical."

10. "Choice of topics for discussion were very good. The leader centered on the needs of the teachers and provided content to meet those needs."
11. "Organization of material; amount of material presented; and variety of material and activities."
12. "Practical applications (experiments, etc.), a knowledgeable and informed instructor, did not just lecture but made course interesting and stimulating."
13. "Introducing new materials, good leadership, new ideas."
14. "Brought out many of the problems we encounter and though ideas were excellent they are not always practical - rather ideal!"
15. "Factual information given was really helpful - for example - how to plan inservice, ideas for a grading system, review of materials for use in the classroom, audio materials."
16. "Vast fund of knowledge leader has gained re subject. Hearing about experiences of other participants."
17. "Knowledgeable leadership. Using a variety of activities in long sessions."
18. No response (2 people)

What do you think the weaknesses of the workshop were? Please specify.

1. "None" (2 people)
2. "It met my needs; therefore, it had no weakness for me."
3. "No real weakness - an 'information overload' at times."
4. "Not enough time." (2 people)

5. "Lack of time for in-depth study. Lack of opportunity for 'on-the-job experimentation."
6. "Too much information." (2 people)
7. "Having too much information to digest."
8. "Not enough time to discuss and work with information given. Not enough opportunity for teachers to share ideas with each other."
9. "Area covered was too wide to really concentrate - but was good overall picture of what we need to concentrate on for future."
10. "I feel that we rushed through some topics."
11. "I wanted more information on the topics covered."
12. "I found that many questions on the post-test were still difficult to answer. The first class addressed the test, and thereafter the information didn't pertain - why the test? Some handouts were helpful for the test."
13. "Norma Shannon's presentation, lack of time."
14. "Previewing films."
15. No response (2 people)

What topics would you like more of?

1. "Evaluating vision and needs of students. Low vision aids."
2. "Information on low vision aids. Utilization of the aids and adapted materials for visually handicapped students."
3. "Low vision aids, curriculum adaptations, facilitating acceptance of program and students, curriculum of specialized skills, assessment."
4. "How to explain the nature of vision problems to classroom teachers. How to work on social development for visually handicapped children

to help them in regular school environment."

5. "Educational implications of visual limitations."
6. "Testing for low vision aids - actually going through it step-by-step."
7. "Visual perception, in-depth of assessment tools, interpretation of medical reports for educational progress."
8. "The SAVI, MAVIS and low vision aids."
9. "SAVI - MAVIS - LOW VISION AIDS (how to assess). Specialized skills, i.e., abacus, slate and stylus, scheduling techniques."
10. "MAVIS - SAVI."
11. "More science, more films, more assessment (examination of tests)."
12. "Some of the handouts should be studied, 10-15 minutes a session - rather than just making a collection. Let's discuss! Share about 'How to' pertaining to skills."
13. "Communication, counseling, self-concept of the visually handicapped students, etc."
14. "Methods in which to fulfill necessary requirements such as daily living skills."
15. "Teaching braille reading, developing curriculum guidelines, better interactions with classroom teachers, better communication skills, counseling techniques for working with visually handicapped. How to establish uniform guidelines for all visually handicapped programs."
16. "Satisfied with content."
17. "A more 'in-depth' coverage of what was done, with more time to discuss and absorb."
18. No response (2 people)

Which, if any, topic(s) did you feel did not relate to your needs?

1. "None" (7 people)
2. "None - all the topics related to my teaching needs."
3. "All related."
4. "All topics related to my needs."
5. "I felt everything was relevant and practical for visually handicapped teachers."
6. "Most were applicable only in general sense, but I knew this in advance."
7. "Too much time on SAVI and MAVIS - knowing about them and what they do would be enough. However, it did provide information to help regular class teachers adapt materials."
8. "Personally, assessment - only because my teacher training was outstanding in this area."
9. "Those relating to the more severely handicapped."
10. No response (4 people)

Can you suggest any additional topics for future inservice?

1. "No."
2. "Exposure to facilities in the Los Angeles area that would be beneficial when assisting a visually handicapped student (eye surgeons, low vision clinics) for our own benefit."
3. "Visual aids in other areas might be explored (reading, math, etc.). Some aids teachers use might be explored, things they have made or adapted."
4. "How to teach classes - as was discussed at the last meeting. Many of us are not as concerned with the regular teacher, but how to improve our own teaching techniques."

5. "Visual perception, in-depth of assessment tools, suggestions for working with parents and our own administration to provide services to meet obvious needs not being met in current program."
6. "Since I've been out of school for several years, am not familiar with the more recent publications, books, special programs, etc. Would like to visit low vision clinic."
7. "Maybe have a high school and elementary school teacher come and talk about their experiences and needs for those mainstreamed into their classrooms."
8. "Counseling - various techniques; self-concept and self-acceptance; sensitivity training for teachers of the visually handicapped. Standards in teaching, what do we have to teach - braille, optacon, what is our philosophy today? Etc. Etc."
9. "Development of self-concept of the exceptional child. How to help the classroom teacher to become more confident in working with visually handicapped children (i.e., specific techniques used.)"
10. "Go into the topics more deeply. Practice scheduling daily living skills with curriculum. Put theory into practice. Discuss interpersonal relationships among staff members - how to solve difficult personality problems when sharing room with others, getting program across to staff, etc."
11. "Practical ideas as to how to help child relate better to peers."
12. "Teaching braille reading, developing curriculum guidelines, better interactions with classroom teachers, better communication skills, counseling techniques for working with visually handicapped, how to establish uniform guidelines for all visually handicapped programs, plus maybe a role playing workshop dealing with inter-

actions with classroom teachers and visually handicapped students."

13. "More detailed discussion regarding methods and curriculum for working with partially sighted at elementary level."
14. No response (6 people)

Other Comments

1. "I dislike inservice because I want to go home, but it was good, and I wish I didn't have to miss so much. Saturday is bad for busy people, but it can't go on forever."
2. "A well-planned, well organized and interesting inservice class. Thank you Joy."
3. "Mrs. Efron was well prepared and made extra efforts to see that we were helped in areas of need."
4. "If course is offered again, please have a different number so those who took it this time could take it again. This was very worthwhile."
5. "Course was very well developed and offered information that was very helpful and useful."
6. "Should have been required of all teachers of visually handicapped students."
7. "Excellent class! The value of the course for me lay in the opportunity to share ideas and feelings with other professionals. I have felt really isolated and have wanted to share my experiences with others and find out if theirs were similar, if they had discovered solutions to similar problems, etc. Really enjoyed viewing the films, learning about various adaptations to science and social studies."

8. "Very good course. Speakers and materials very informative."
9. "It would be excellent, if possible, to have a workshop like this every year - to work on a variety of topics and bring teacher to up-to-date thought in the education of the visually handicapped."
10. "More time should have been allowed for the course. The material provided was excellent but I felt a bit overloaded at times. This is a lot to absorb in such a short period of time."
11. "Had very negative feelings about panel."
12. "Leader did excellent job and was well planned but it covered such a wide area it was hard to assimilate all at once."
13. "Excellent: we need more classes like this."
14. "Your enthusiasm and enjoyment during the teaching sessions was truly inspiring."
15. "Excellent course. Pace was varied which kept class interest high."
16. No response (4 people)

APPENDIX M. Representative Written Comments on Classroom Teacher Surveys

Comments by Classroom Teachers on Pre-Test Survey

The following quotes are representative of comments by classroom teachers on the pre-test survey.

1. "I have had only one visually handicapped student. Her vision was not a problem. I spoke casually with the VH teacher about the student and they advised no special help was necessary for that student." (Served by resource teacher in experimental group.)

2. "This form has been very difficult to fill out. I have just one visually handicapped student. His attendance record is very poor, as is his attitude toward school. In discussing this with the special teacher, I found that his attitude is not related to his handicap. His visual handicap is minimal. He can do all of the assignments and needs no special materials or books. He does sit in one of the front seats and that is the only adjustment I have had to make for him.

   I have had three conferences with his special teacher. She has worked with his parents in trying to improve the student's attitude and attendance. He still misses many of the days that she is here to work with him.

   She is helpful and concerned. She tries to carry out the assignments that I send over with him.

   I hope this information has been of some use to you." (Served by itinerant teacher in control group.)

3. "The itinerant teacher assigned is excellent. Her effective input to the classroom teacher is automatically limited by her program, i.e., she has been allotted no time for conference time with classroom teacher; classroom teacher also allotted no time." (Served by itinerant teacher in control group.)

4. "Supportive services do not apply to VH children in E.H. classrooms. Only material is provided. Could use more support if it were possible." (Served by resource teacher in experimental group.)

5. "I have never used any supportive services of the VH students. I didn't know there were any special materials." (Served by itinerant teacher in experimental group.)

6. "Supportive services are adequate, however the two resource teachers in the VH program simply cannot sit in the room with teachers who are 'mainstreaming'. I'm not convinced these youngsters are benefiting - my guess is they are becoming perhaps more frustrated." (Served by resource teacher in control group.)

7. "I was unable to fill out your survey form because it doesn't seem to apply to my classes. For the last 16 years I have taught occupational training-type classes in art specialties requiring excellent vision. I now have one student with poor eyesight. This makes two in 16 years, I believe. This student is doing well but will never be able to work without supervision due to the dangerous tools (acids, gasses, flames, etc.) I normally have no reason to use the supportive services for VH students so I really have no contact or knowledge in that area. It is totally 'foreign' to me." (Served by resource teacher in control group.)

8. "I don't even know who this person is! I get visual reports on persons with eye problems." (Served by itinerant teacher in control group.)

9. "In 10 plus years, VH students have always been welcome in my classroom. This is still true for all VH and Special Education students.

   In fact, for the past 2 years (1978-1980), I have served as chairman of a Special Education Advisory Committee for the Unified School District. This was prompted by my own experience with special students and the fact that one of my own children is educationally handicapped.

   Inspite of experience, training, and reading, I am not completely prepared. There are areas where my expertise is excellent and others could benefit from well planned inservice sessions. If 'Master Plan' and 'Mainstreaming' continue, we need help and support. If a special student is to receive maximum benefit the classroom teacher must be prepared and assisted to provide it. The total integration of special students into a viable program depends on the ability of those now involved to help others. Please help us to help your students." (Served by resource teacher in control group.)

10. "Because we are a large junior high and have a very large number of VH students, the resource teacher does not have the time to do a lot of these things. Also, since new credentials require course work in Exceptional children they should not need to." (Served by resource teacher in experimental group.)

11. "The pupil I had was partially sighted and was treated as an ordinary pupil." (Served by resource teacher in experimental group.)

12. "I am unable to answer #1 to 36 since my involvement with VH has practically been limited to the classroom. The supportive services I've received consists of test and textbook enlargements; beyond this, I have no idea what is involved in the supportive services. The best I can do in the classroom is to give the student a front seat. I make certain that I talk as I write on the board in order that the student can hear and learn rather than see and hear and learn. When I use the overhead projector, I can make the plastic sheets available to the student so that material projected can be looked at more closely and notes taken as necessary." (Served by itinerant teacher in experimental group.)

13. "I am not aware of what services are offered." (Served by resource teacher in experimental group.)

14. "I've never met the itinerant teacher." (Served by itinerant teacher in control group.)

15. "The representative came one morning for a few minutes. They asked if the VH student was doing all right, I said 'yes'. Then he said, 'If you have any problems let me know.' I had none so I did not call. Thank you." (Served by itinerant teacher in control group.)

APPENDIX M. Representative Written Comments on Classroom Teacher Survey

Comments by Classroom Teachers on Post-Test Survey

The following quotes are representative of comments by classroom teachers on the post-test survey.

1. "His basic attitude and behavior are his problem; not his visual handicap." (Served by itinerant teacher in control group.)

2. "The child with the visual handicap in my class is not troubled by that fact. He came to school last year speaking no English. His present school problems are related to language as opposed to visual in so far as his visual problem has been corrected with glasses. He attended a special P.E. program this year. He has improved to the point that he no longer needs this special class. He participates successfully with his class now. This child has made a fine adjustment with his class and the class understands his visual handicap." (Served by itinerant teacher in experimental group.)

3. "I have had students (VH) that were a great experience for all students as well as the teacher." (Served by resource teacher in experimental group.)

4. "Unfortunately, I had to handle too many VH students this year. I had all of the 9th grade VH students in only 2 classes, both of which were 35-40 in size. This inequitable distribution made it impossible to cope with their individual needs as time and numbers did not permit me to do so. Late work was accepted without penalty but that placed the burden more on my shoulders than the resource teacher - contacting parents, continually sending lists of missing work to her and home, etc. In short, this year's experience was very negative and hopefully will not be repeated." (Served by resource teacher in experimental group.)

5. "I must add one comment. I am tremendously frustrated by this program; it represents an additional difficulty and even a burden for the classroom teacher who is trying to meet the needs of unprepared or inadequately prepared regular students. HELP!" (Served by resource teacher in experimental group.)

6. "I only know of one student who receives help. He's using his tutor as an excuse to leave class. He never wears his glasses. His tutor or his relative, who is employed at this school, could be most helpful by finding his glasses and reminding him to wear them. The student seems to use his handicap as an excuse for not behaving according to normal, accepted standards. He's spoiled, pampered, and a nuisance." (Served by itinerant teacher in control group.)

7. "I do not feel I can judge the supportive services since I know so little about them and had very little contact. My VH student was not severely handicapped, attended class seldom after the first month and finally checked out of school. I have had two previous experiences with VH students, also in Journalism and these two were completely blind. I accepted the second one reluctantly because there are too many phases of journalism that require sight. The student finally dropped the class - she was not doing any of the work despite time extensions, etc. The student I had this semester was a 10th grader and I think her main problem was poor attendance (1st period class). I believe counselors should be more selective of the types of classes they put VH students in. Journalism requires proof-reading." (Served by resource teacher in control group.)

8. "The itinerant teacher who took this child was excellent in the services she gave. She was helpful to me and attended parent conferences which I felt was helpful." (Served by itinerant teacher in experimental group.)

9. "I have not been adequately informed about the various services or inservice classes offered for teachers who have VH students. Nor have I ever been completely informed about a student's specific disability; only that the student I had was in a special educational program. I cannot recall ever having a formal introduction to the needs of the handicapped students in the four years I have been teaching." (Served by resource teacher in experimental group.)

10. "Have no idea of what the resource person does to help my VH students. Never see any specific results." (Served by itinerant teacher in experimental group.)

11. "Except for placing students in my classes, duplicating materials and providing a resource room, there is no contact between the Special Education teacher and me during the semester. Is this to be interpreted as a compliment to my supposed skills?" (Served by resource teacher in control group.)

12. "I am sure our VH program is great, but there is no contact between the VH department and other faculty and staff - therefore ratings relating to communication between departments either leave me in question or result in poor ratings because there is no communication." (Served by itinerant teacher in control group.)

13. "I'm extremely sorry to be so negative in my responses to your survey. However, I was in no way helped by the gentleman who was tutoring. First of all, no one even told me that she was in a special help program. I had to go to the Mainstream teacher to even find out that she had a helper. After I requested that he come to speak to me, he finally came and spoke briefly with me once. He gave me no insight into the student's visual difficulties. He asked nothing about what I was doing with her in the classroom. As a result of my ignorance and his negligence, the student will fail my class this semester. I feel terrible about this. If this is an example of how the program works, I hope no other unfortunate students are assigned to my class for the next year." (Served by itinerant teacher in control group.)

14. "I saw the itinerant teacher once for 10-15 minutes. However, I could have contacted her." (Served by itinerant teacher in control group.)

15. "The VH teacher takes the students from the classroom and I'm not aware of what they do. I have received no feedback from her and no help in meeting any special needs of these students." (Served by itinerant teacher in control group.)

16. "I have one VH student in a singing class. I have used no support services. I feel extremely confident to deal with all aspects of materials, teaching and working with the student - she's a neat kid. But - I have a concert and all graduation activities to organize and no time to do your survey." (Served by resource teacher in control group.)

17. "Regular teachers should be inserviced on needs of VH children on released time or overtime pay." (Served by resource teacher in experimental group.)

18. "I have not been adequately informed about the various services or inservice classes offered for teachers who have VH students. Nor have I ever been completely informed about a student's specific disability; only that the student I had was in a special educational program. I cannot recall ever having a formal introduction to the needs of the handicapped students in the four years I have been teaching." (Served by resource teacher in experimental group.)

19. "There needs to be inservice help for regular classroom teachers working with VH. Plus, it would help to have a copy of I.E.P. for VH to assist the regular VH teacher. Dr. L. Doscher said, 'It was recommended that the I.E.P. for Special Education students be given to regular teachers working with Special Education students,' at closing session of state evaluation of Los Angeles Unified School District Special Education. How about some help?" (Served by resource teacher in control group.)

20. "I find it is not working well in low classes but in one higher class, it is (due entirely to motivation of student)." (Served by resource teacher in experimental group.)

21. "Regular classroom situation is overwhelming for most VH students I have had." (Served by resource teacher in control group.)

22. "Note takers have been very helpful (most helpful) when their hours can be matched to the student's schedule. I suggest that Special Education teacher program students with this in mind for English classes such as mine. I need a note taker to narrate the 'visuals' presented in films, slides, filmstrips, etc." (Served by resource teacher in control group.)

23. "How much funding was provided for this survey? How are these results going to help VH students? The questionnaire was a bit long. Also isn't a questionnaire the poorest way to obtain valid information from a group of people? Can the effectiveness of the inservice training be evaluated by this questionnaire? I really doubt it! It will not give you valuable input: maybe an idea or trend." (Served by itinerant teacher in control group.)

24. "Information could have been gathered with a simple and less time consuming form." (Served by resource teacher in experimental group.)

25. "I realize the need for these questionnaires but along with all the extra work of having handicapped students, this time of the semester we classroom teachers are over burdened and don't have the time to fill in yet another questionnaire." (Served by resource teacher in control group.)

26. "Questions dealing with motivation needed." (Served by itinerant teacher in control group.)

APPENDIX N. Master Data Information

Master Data Information 1

Number of Responses to Each Rating for Individual Survey Items for Self-Evaluations of Classroom Teachers on the Pre-Test Survey (January 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	2.93	2.99	3.59	3.20	3.24	3.18	2.75	2.92	2.83	2.30	2.44	2.51	2.91	3.34	2.66	3.46	2.39	2.66
Ratings																		
Extremely Confident (1)	8	8	2	6	11	12	13	8	13	30	20	17	9	5	23	3	24	23
Confident (2)	44	41	20	37	26	26	48	42	47	58	57	58	38	17	39	13	57	53
Adequate (3)	46	48	47	38	43	39	44	43	26	32	37	41	43	33	34	32	31	35
Minimally Adequate (4)	27	25	31	36	22	23	24	25	26	7	13	10	21	21	18	22	16	17
Inadequate (5)	12	15	37	20	29	25	8	11	13	8	5	8	12	19	12	19	4	5
Not Applicable	1	0	1	1	5	6	1	7	11	3	1	2	13	37	6	39	4	2
No Response	1	2	1	1	3	8	1	3	3	1	6	3	3	7	7	11	3	4

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	2.53	2.27	2.20	2.88	2.91	3.07	2.94	2.81	2.43	2.41	2.61	2.97	2.63	2.19	2.57	2.80	2.83	2.74
Ratings																		
Extremely Confident (1)	19	28	33	12	10	6	13	16	18	22	15	10	14	29	17	15	12	15
Confident (2)	47	56	34	38	39	29	24	37	59	58	46	36	37	59	30	33	33	33
Adequate (3)	46	37	19	30	47	41	35	41	44	37	41	38	49	32	27	32	36	44
Minimally Adequate (4)	12	7	8	14	13	17	18	25	12	14	23	18	12	8	7	21	18	20
Inadequate (5)	6	4	6	16	17	16	13	10	3	4	2	17	5	2	9	10	10	6
Not Applicable	4	4	34	3	5	23	26	6	1	2	7	17	19	7	43	22	23	14
No Response	5	3	5	6	8	7	6	4	2	2	5	3	3	2	6	6	7	7

APPENDIX N. Master Data Information
Master Data Information 2

Number of Responses to Each Rating for Individual Survey Items for Self-Evaluations of Classroom Teachers on the Post-Test Survey (May 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	2.69	2.85	3.28	2.96	2.98	3.00	2.76	2.78	2.64	2.26	2.56	2.48	2.88	3.20	2.72	3.36	2.44	2.49
Ratings																		
Extremely Confident (1)	14	11	9	17	26	29	19	20	28	42	25	29	17	10	36	7	38	34
Confident (2)	80	67	36	50	40	36	64	64	64	82	80	81	48	36	48	30	67	73
Adequate (3)	58	70	68	69	54	55	68	54	57	51	48	48	63	52	48	39	55	45
Minimally Adequate (4)	27	23	44	33	31	30	24	27	19	5	20	12	26	25	18	20	14	17
Inadequate (5)	11	19	31	22	29	32	16	16	17	10	14	15	18	31	26	36	12	15
Not Applicable	1	1	2	0	9	7	1	8	5	1	3	4	17	33	12	57	5	6
No Response	4	4	5	4	6	6	3	6	5	4	5	6	6	8	7	6	4	5

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	2.50	2.25	2.39	2.74	2.76	2.96	2.83	2.77	2.43	2.34	2.51	2.96	2.68	2.18	2.45	2.56	2.79	2.67
Ratings																		
Extremely Confident (1)	33	44	55	24	22	18	24	20	28	37	31	19	21	53	35	32	25	25
Confident (2)	71	85	41	70	67	49	46	60	82	85	67	48	55	69	41	49	43	60
Adequate (3)	49	37	26	45	45	39	42	55	55	44	51	31	47	38	30	39	39	39
Minimally Adequate (4)	15	12	11	24	25	26	18	24	15	15	16	20	17	9	6	15	24	17
Inadequate (5)	15	10	12	23	21	26	25	18	8	9	13	30	15	10	17	16	19	20
Not Applicable	7	1	60	6	10	28	31	13	2	1	12	23	34	11	60	35	37	26
No Response	5	6	10	3	5	9	9	5	5	4	5	4	6	5	6	9	8	8

APPENDIX N. Master Data Information
Master Data Information 3

Number of Responses to Each Rating for Invididual Survey Items for Evaluations by Classroom Teachers of Supportive Services on the Pre-Test Survey (January 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	2.60	2.53	2.81	2.58	2.65	2.42	2.74	2.73	2.88	2.43	2.43	2.33	2.35	2.41	2.55	2.53	2.51	2.41
Ratings																		
Outstanding (1)	20	17	20	22	24	30	15	13	11	17	30	30	31	17	31	16	22	16
Very Helpful (2)	40	39	31	41	37	36	36	35	31	44	39	39	39	25	33	31	35	38
Adequate (3)	36	39	32	29	25	23	35	33	25	23	25	26	22	28	25	28	31	25
Minimally Helpful (4)	18	11	17	14	18	15	15	9	10	10	9	5	9	7	16	7	12	13
Not Helpful (5)	7	5	16	11	13	8	11	12	16	14	12	10	10	9	13	7	7	9
Not Applicable	4	11	5	4	6	8	11	19	26	15	7	7	8	24	4	22	13	15
No Response	14	17	18	18	16	19	16	18	20	16	17	22	20	29	17	28	19	23

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	2.59	2.34	2.50	2.56	2.66	2.32	2.49	2.71	2.46	2.42	2.37	2.28	2.30	2.24	2.44	2.70	2.80	2.40
Ratings																		
Outstanding (1)	15	23	20	21	17	21	16	16	19	19	15	30	24	23	16	14	10	22
Very Helpful (2)	39	41	24	38	36	40	33	30	38	43	40	34	37	33	31	25	23	33
Adequate (3)	30	24	18	27	27	19	26	29	23	19	24	21	21	18	23	22	23	20
Minimally Adequate (4)	11	11	12	12	9	7	8	15	8	10	15	5	5	5	4	7	8	7
Not Helpful (5)	8	4	6	10	13	6	6	9	8	7	6	9	7	5	7	11	10	8
Not Applicable	12	12	28	8	11	15	20	14	16	14	13	13	16	27	27	29	32	20
No Response	24	24	31	23	26	31	30	26	27	27	26	27	29	28	31	31	33	29

APPENDIX N. Master Data Information
Master Data Information 4

Number of Responses to Each Rating for Individual Survey Items for Evaluations by Classroom Teachers of Supportive Services on the Post-Test Survey (May 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	2.65	2.58	2.73	2.69	2.65	2.57	2.72	2.78	2.85	2.58	2.49	2.45	2.53	2.77	2.56	2.57	2.66	2.64
Ratings																		
Outstanding (1)	40	40	37	39	46	48	39	38	35	44	49	32	47	27	55	34	36	43
Very Helpful (2)	45	40	40	50	38	34	32	27	23	36	46	43	39	32	34	31	39	34
Adequate (3)	34	30	47	41	36	42	53	45	44	40	36	39	47	43	34	29	42	32
Minimally Adequate (4)	23	21	31	24	21	21	24	23	21	12	18	16	16	16	23	12	20	19
Not Helpful (5)	19	15	18	24	25	19	23	23	25	22	20	19	19	19	23	17	19	23
Not Applicable	4	11	8	4	13	13	8	17	23	13	9	8	8	30	9	43	17	22
No Response	10	18	14	13	16	18	16	22	24	19	17	18	19	28	17	29	22	22

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	2.67	2.46	2.49	2.62	2.74	2.46	2.61	2.61	2.46	2.33	2.59	2.43	2.46	2.29	2.50	2.65	2.83	2.39
Ratings																		
Outstanding (1)	37	43	38	43	41	43	35	42	43	54	38	58	41	52	41	36	29	52
Very Helpful (2)	37	48	26	40	33	43	37	34	39	40	38	29	38	39	24	19	22	33
Adequate (3)	41	36	31	34	37	28	29	36	36	30	42	29	31	24	27	30	27	28
Minimally Helpful (4)	16	18	12	22	20	16	21	22	15	13	19	14	13	6	5	9	14	13
Not Helpful (5)	22	15	14	23	27	18	16	18	16	16	16	21	16	19	21	21	23	18
Not Applicable	17	12	47	14	15	21	27	17	19	17	18	22	31	29	49	49	47	25
No Response	25	23	27	17	22	24	30	26	25	25	24	24	25	26	28	31	33	26

APPENDIX N. Master Data Information
Master Data Information 5

Number of Responses to Each Rating for Individual Survey Items for Self-Evaluations of Resource and Itinerant Teachers on the Pre-Test Survey (January 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	2.03	2.39	2.39	2.18	2.13	2.16	2.19	2.22	2.58	2.16	2.06	2.24	2.58	2.91	2.15	3.10	2.52	2.82
Ratings																		
Outstanding (1)	7	2	5	8	4	3	6	6	3	3	9	7	3	1	6	2	4	4
Very Helpful (2)	18	15	14	15	21	23	15	14	10	22	16	15	15	13	16	7	13	9
Adequate (3)	8	14	10	6	6	4	10	11	15	6	5	8	10	8	11	11	9	9
Minimally Adequate (4)	0	0	4	4	1	2	1	1	3	1	3	2	3	8	0	8	4	9
Not Helpful (5)	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	3	1	1
Not Applicable	0	2	0	0	1	1	1	1	2	1	0	0	0	1	0	2	1	1
No Response	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	3.09	2.42	2.55	2.06	2.33	2.30	2.55	2.06	2.06	2.21	2.49	2.24	2.38	2.38	2.59	2.77	3.05	2.13
Ratings																		
Outstanding (1)	1	4	7	8	5	5	5	10	7	7	3	8	5	5	3	2	0	7
Very Helpful (2)	8	14	7	17	15	18	12	14	17	15	17	14	16	16	14	7	5	15
Adequate (3)	14	13	11	6	10	6	10	7	9	8	9	8	7	7	7	13	12	9
Minimally Adequate (4)	5	1	5	2	3	3	5	1	0	3	2	1	2	2	2	3	2	1
Not Helpful (5)	4	1	1	0	0	1	1	1	0	0	2	2	2	2	3	1	2	0
Not Applicable	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	6	11	0
No Response	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3

APPENDIX N. Master Data Information
Master Data Information 6

Number of Responses to Each Rating for Individual Survey Items for Self-Evaluations of Resource and Itinerant Teachers on the Post-Test Survey (May 1980)

	Survey Items																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mean	1.79	2.42	2.15	1.97	1.97	2.15	2.21	1.97	2.16	1.94	1.79	1.82	2.12	2.19	1.91	2.41	2.38	2.39
Ratings																		
Outstanding (1)	11	2	3	10	8	6	4	8	6	10	14	12	7	7	8	5	1	3
Very Helpful (2)	19	17	23	16	21	19	18	18	16	16	13	15	17	17	21	13	20	17
Adequate (3)	4	12	8	7	3	7	11	7	9	5	7	6	9	4	5	11	12	10
Minimally Adequate (4)	0	2	0	1	2	2	0	0	1	0	0	0	1	3	0	2	1	3
Not Helpful (5)	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0
Not Applicable	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	2	0	1
No Response	0	1	0	0	0	0	1	1	1	1	0	0	0	1	0	0	0	0

	Survey Items																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Mean	2.56	2.21	2.18	1.94	2.03	2.24	2.21	2.18	1.85	1.94	2.27	2.00	2.07	1.94	2.16	2.22	2.61	1.81
Ratings																		
Outstanding (1)	0	3	7	9	7	6	10	6	9	8	4	7	9	10	7	3	2	10
Very Helpful (2)	20	23	15	18	20	16	12	18	21	20	19	20	11	14	14	16	11	17
Adequate (3)	9	7	9	7	6	9	6	9	4	6	9	7	9	8	10	7	11	4
Minimally Adequate (4)	5	0	2	0	1	1	4	0	0	0	2	0	1	0	1	1	4	0
Not Helpful (5)	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
Not Applicable	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	4	3	0
No Response	0	0	1	0	0	0	1	0	0	0	0	0	3	2	2	3	3	3